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FAMILY SOCIAL PARTICIPATION AND SOCIAL STATUS SELF-RATINGS

W. A. ANDERSON

Department of Rural Sociology, Cornell University

INTRODUCTION

IN OUR studies of social participation in rural areas, we have shown that it is the members of the upper class families who are the participators.¹ They belong to the organizations, hold the offices, serve on the committees, and are the community leaders. Likewise we have shown that the social participation of the individual is closely associated with the participation of other members of the family. Social participation is to a considerable degree, a family trait. Family members participate in social activities if other family members are participators; they do not if other family members are non-participators.²

In these studies, factors have been related to the measures of participation used and their association described. Some of these indicate that social participation as expressed

in leadership roles is, in part, a status reaction of the community members who are expressing a degree of acceptance on their part, of these participators. The community members are acknowledging the higher relative position that these individuals hold in their midst.

On the other hand, participation or non-participation may be an expression by the participators or non-participators of their own feeling of superiority or inferiority in the community. It is with this hypothesis that this paper deals. If people in our society, do not participate because they accept inferiority, then the democratic process will have difficulty in operating. One of the practical problems becomes, under these conditions, how can organizations get willingly subservient people who exhibit a mass inertia to become active in their programs.

DATA USED

The data used in studying the relationship of social status to social participation consists of the self-ratings of 344 New York farm families by their male or female heads relative to five factors, two indicators of social status and three indicators of social participation.³ These persons were asked:

¹W. A. Anderson and Hans Palmbeck. *The Social Participation of Farm Families*, Cornell Univ. Agr. Exp. Sta. Dept. of Rural Sociology Mimeo. Bul. No. 8., March 1943. Other participation studies are those on Farm Women in the Home Bureau, Farmers in Barn Bureau, Farm Families in the Grange and Farm Youth in the 4-H Club; Mimeo. Bulletins number 3, 4, 7, 8, 9, 13 and 14.

²W. A. Anderson, *The Family and Individual Social Participation*, *American Sociological Review*. Vol. 8, No. 4, p. 420 ff, Aug. 1943 and Vol. 8, p. 721, Dec. 1943.

³These data were obtained in Otsego County, New York, by William Reeder and Joseph Geddes,

"If you were to divide the families of your community into four groupings in which would you place your family in regard to the following factors: (1) the amount of money available for family living; (2) living comfortably in the home; (3) leadership in community affairs; (4) participation in community organizations; and (5) participation in informal social activities. Grouping one is the most favorable or has the most, grouping four is the least favorable or has the least." They were also asked to rate for these same factors, the three families with whom their family participated most, but the results of these ratings will not be dealt with here.

HOW DO THE FAMILIES RATE THEMSELVES?

Our first step is to indicate how these families rate themselves relative to each of these five factors.

Less than ten per cent of the families rate

themselves in the first grouping for each factor. The same proportion, nine per cent, put themselves in grouping one with respect to living comfortably in the home, participation in formal organizations, and participation in informal social affairs. Only six per cent say they are in the first grouping as to leadership in community affairs, and five per cent say they are in this grouping in the amount of money they have for family living (Table 1).

Almost twice as many say they belong in grouping one with regard to living comfortably in the home as belong to this grouping in the amount of money for family living. Almost the same percentage put themselves in grouping one relative to community leadership and money available for family living (Table 1).

Of the 344 families, 41 per cent rate themselves in grouping two in the matter of living comfortably in their homes, so that one-half of the families believe they are in the upper half of the community in comfortable living. However, only thirty per cent rate themselves in grouping two with respect to the

TABLE 1. THE SELF-RATINGS OF 344 FARM FAMILIES IN OTSEGO COUNTY, NEW YORK, AS TO THEIR POSITION IN THE COMMUNITY RELATIVE TO LEVEL OF LIVING AND SOCIAL PARTICIPATION

Factors	Number Rating Self in					Per cent Rating Self in				
	First group- ing	Second group- ing	Third group- ing	Fourth group- ing	Total	First group- ing	Second group- ing	Third group- ing	Fourth group- ing	Total
Amount of money for family living..	17	103	152	72	344	5	30	44	21	100
Living comfortably in the home.....	31	142	117	54	344	9	41	34	16	100
Leadership in community affairs....	20	28	59	236	343	6	8	17	69	100
Participation in formal organizations	32	33	77	200	342	9	10	22	59	100
Participation in informal social affairs.....	30	101	124	89	344	9	29	36	26	100

themselves in the first grouping for each factor. The same proportion, nine per cent, put themselves in grouping one with respect to living comfortably in the home, participation in formal organizations, and participa-

working on the problem of "Informal Social Participation." Joseph Geddes gave his life in the service of his country in the South Pacific.

money they have available for family living. In other words, 15 per cent more, feel that they live comfortably than feel that they are in the upper half of the community in money available for family living (Table 1).

As to leadership in community affairs, eight per cent put their families in the second grouping, so that only 14 per cent of the families feel that they are in the top group-

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ings in community leadership. In participation in formal organizations, only ten per cent rate themselves in grouping two, so that only one in each five families consider themselves in the top groupings in formal social activity. On the other hand, 29 per cent rate themselves in grouping two as to informal participation, so that two out of each five families are in the top grouping in this regard (Table 1).

Of all the families, 21 per cent rate themselves in the fourth or lowest grouping as to

THE SELF-RATINGS AND SOME SOCIAL CHARACTERISTICS

Our next step is to show the relationship of these family self-ratings to selected characteristics of these farm families. For this, the coefficient of contingency is used. Our self-ratings are always four-fold but the social characteristics are almost all five or six-fold, so that the contingency coefficients probably approximate a Pearsonian correlation coefficient. While these coefficients can probably not exceed .87 to .89, no correction

TABLE 2. THE RELATIONSHIP BETWEEN SIX SOCIAL CHARACTERISTICS OF 344 OTSEGO COUNTY, NEW YORK, FARM FAMILIES AND THEIR SELF-RATINGS ON LEVEL OF LIVING AND SOCIAL PARTICIPATION AS EXPRESSED IN THE COEFFICIENT OF CONTINGENCY

Social Characteristics	Self-ratings on				
	Money available for family living	Living comfortably in the home	Leadership in community affairs	Participation in formal organizations	Participation in informal affairs
Size of farm.....	.27	.28	.09	.21	.48
Land class.....	.21	.29	.22	.17	.14
Tenure status .....	.28	.31	.18	.23	.16
Number of years family established.....	.16	.24	.26	.24	.25
Sewell socio-economic score.....	.54	.46	.43	.45	.44
Chapin formal participation score.....	.41	.44	.52	.64	.40

the amount of money available for family living. Sixteen per cent put themselves in this grouping relative to living comfortably in the home. One in each five to six families feel inferior to the other families in their community in their level of living (Table 1).

In leadership in community affairs, 69 per cent rate their families in the lowest grouping. In formal participation, 59 per cent give their families this same rating while only 26 per cent give them this rating in participation in informal activities (Table 1).

These farm families rate themselves highest, therefore, in living comfortably in the home and in informal participation, slightly lower in the amount of money available for family living, and lowest in participation in community organizations and leadership in community activities.

They rate themselves higher in levels of living than they do in social participation.

is made. They are presented as derived.

The size of the farms operated shows a small but significant relationship to the ratings of the families as to amount of money available for family living, living comfortably in the home, participation in formal organizations, and a large and significant relationship to participation in informal activities. It shows a low and non-significant relationship to ratings as to leadership in community affairs (Table 2).

The basis for these conclusions is that the coefficients of contingency are all five or more times the size of the probable error of a coefficient of .00 except for the relationship between size of farm and community leadership, for the probable error of a coefficient of contingency of .00, using Garrett's method is .036.*

* Garrett, H. E., *Statistics in Psychology and*

In general, the families operating the larger farms in this area, chiefly dairy farms, rate themselves in the higher classes, and particularly with reference to informal participation. They do more visiting, have more company, and are active informally with greater frequency. Leadership in community affairs, on the other hand, does not show a significant relationship to size of farm operated. It is known that large farm operators deliberately keep themselves out of leadership roles in many rural communities.

The class of farm land operated shows a significant relationship to self-ratings as to money available for family living, living comfortably in the home, and leadership in community affairs. It shows a smaller and slightly significant relationship to self-ratings as to participation in formal affairs, and less to participation in informal activities. The families on the best farms rate themselves as having most money for living purposes, as living comfortably, and as being leaders, while those on the poorer farms rate themselves oppositely. This is also true but less so for formal and informal participation (Table 2).⁵

Tenure status shows even more significant relationships than land class or size of farm operated to the self-ratings as to money for family living, living comfortably in the home, and participation in formal affairs. It shows considerably more relationship than size of farm operated to ratings as to leadership in the community and about the same as the relationship between land class and leadership self-ratings and land class and self-ratings as to participation in informal affairs. The land owners rate themselves high in these qualities and the tenants and farm laborers give themselves the low ratings.

The number of years the family has been established shows a little relationship to the

self-ratings to money available for family living. It shows significant relationships to all the other four factors. The older, longer established families are the ones who consider themselves the leaders and the participants in formal and informal social activities (Table 2).

But the two characteristics that show the greatest relationship to these self-ratings are socio-economic status as expressed by the Sewell socio-economic score and their actual formal social participation as expressed by the Chapin formal participation index.⁶

The contingency coefficients between the socio-economic status scores of these families and their self-ratings, range from .43 for the relationship between this score and the self-ratings as to leadership in community affairs to .54 between this score and the self-ratings as to money available for family living (Table 2). These coefficients show that there is significant relationship between the social status of these families as measured by an objective scale and the opinions these families have of their own leadership position in the community and their opinion of their position in both formal and informal participation.

The measurement of the extent and intensity of the formal social participation of these families by the Chapin social participation index also correlates highly with the judgment of these families of their social and economic position in the community, their leadership in community affairs, and their formal and informal participation. The coefficients range from .40 between their social participation index and their self-ratings as to participation in informal affairs to .64 between this index and their self-ratings as to participation in formal activities (Table 2).

An important generalization to be drawn

Education, New York, Longman Green and Co., 1937, p. 387 ff.

⁶For a brief description of New York State farm classification, see W. A. Anderson and Hans Plambach, *Social Participation of Farm Families*, Cornell Agr. Exp. Sta., Rur. Soc. Mimeo., Bul. 8, p. 4. March, 1943.

⁵For the socio-economic status scale, See Wm. H. Sewell, *Construction and Standardization of a Scale for Measurement of the socio-economic status of Oklahoma farm families*, Okla. A & M College, Tech. Bul. No. 9 Stillwater, April, 1940. For the participation scale, see F. Stuart Chapin, *Social Participation Scale*, Univ. of Minnesota Press, Minneapolis, 1937.

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from these relationships is that social participation and leadership activities in rural communities are not only carried out by families on the basis of their social standing with the community, their economic position, their tenure status, and their family maturity, but this participation and leadership behavior is also an expression of their own opinions of their social position.

The tenants, the residents on the poor farms or the families of low socio-economic status do not participate or take leadership roles, not only because the community does

participation in informal activities. Informal activities are not significantly influenced in the minds of these families by the possession of goods as is leadership and participation in community activities. Living comfortably in the home is less related to leadership and participation in formal organizations than is the amount of money available for family living. But the differences are only slight, except in the case of participation in formal organizations, where the amount of money available for family living seems to be a considerably more important consideration

TABLE 3. THE COEFFICIENTS OF CONTINGENCY BETWEEN THE SELF-RATINGS OF 344 OTSEGO COUNTY, NEW YORK, FARM FAMILIES ON FIVE SOCIAL STATUS AND SOCIAL PARTICIPATION FACTORS

Self-ratings on	Self-ratings on			
	Living comfortably in the home	Leadership in community activities	Participation in formal organizations	Participation in informal activities
Amount of money for family living.....	.66	.45	.44	.23
Living comfortably in the home.....		.40	.23	.30
Leadership in community activities.....			.84	.37
Participation in formal organizations.....				.43

not confer these roles upon them, but they themselves accept an inferior status and behave accordingly.

THE INTERRELATIONSHIPS OF THESE SELF-RATINGS

The next step is to relate the ratings these families assign to themselves to each other.

The self-ratings as to the money available for family living and living comfortably in the home have both a high and significant relation to each other, .66. These measures of family level of living should correlate similarly, therefore, with the self-ratings on leadership and participation.

The self-ratings as to the amount of money available for family living give higher contingency coefficients than do the self-ratings as to living comfortably in the home when related to the self-ratings as to community leadership and participation in formal organizations. They give lower coefficients when related to the self-ratings as to par-

than comfortable living in the home (Table 3).

The relationship of the ratings these families give themselves as to leadership in community affairs and participation in formal organizations is a close one, the contingency coefficient between them being .84 (Table 3). Since these are four-fold classifications and the contingency coefficient of a four-fold table cannot exceed .87, it can be seen that the relationship is very close. Leadership in community affairs, is in part, participating in formal organizations and taking leadership roles in them so that they go hand-in-hand. Both those who participate and those who do not recognize this in their ratings of themselves.

Leadership in community activities and participation in informal activities show no such relationships of the self-ratings as to leadership and formal participation, though there is a small and significant relationship between them.⁷ This is supported by the fact

that the self-ratings as to participation in formal organizations and the ratings as to participation in informal activities show a significant relationship .43, which is ten times the size of the probable error for a coefficient of contingency of .00 for this sample of 344 families.⁷

In the minds, therefore, of these farm families there are associations between the various expressions of social participation and between these and their social status as indicated by money available for family living and comfortable living in the home.

SUMMARY

Family social participation, it appears, therefore, is not only the result of status

⁷ This is based on Garrett's suggestions concerning the P. E. of a contingency coefficient previously referred to.

CRIMINOLOGICAL THEORIES OF VIOLATIONS OF WARTIME REGULATIONS*

MARSHALL B. CLINARD

Vanderbilt University

WITHIN recent years there have been a number of papers which have attempted to reformulate criminological theory so as to include not only violations of the customary criminal law but violations of the white collar type, where the measures taken are generally either civil or administrative in character.¹ White collar crime has not been integrated into criminological theory in part because its scientific implications have not as yet been fully recognized. This is indicated by the fact that practically

reactions on the part of community members, but is also the result of the opinions families hold concerning their own position in the community. The evidence presented shows that families accept for themselves a status position and participate in accordance with these self-judgments. Their self-judgments as to their own participation are closely correlated to measures of their actual social participation.

The promotion of wider social participation, therefore, is not simply a matter of getting families to join in activities or to accept leadership responsibilities, but also a problem of overcoming attitudes toward themselves that block such participation. Much of the participation inertia in our society is no doubt related to these self-attitudes.

no research is now being done in this field. There is also an element of doubt upon the part of some as to whether such behavior actually is criminal. Moreover, there is possibly some hesitancy of otherwise scientific writers to examine the behavior of business concerns since this involves certain values of the economic system which are partially in the mores of our day and should not be questioned.

* Note: Paper read before Criminology Section of the American Sociological Meetings, Cleveland, Ohio, March, 1946. Permission has been granted by the Office of Price Administration to use the materials contained in this paper. The views expressed, however, are the author's. For two and a half years the author was Chief, Analysis and Reports Branch Enforcement Department, Office of Price Administration, Washington, D.C.

¹ See Edwin H. Sutherland, "White Collar Criminality," *American Sociological Review*, 5:1-12, February, 1940; Edwin H. Sutherland, "Is White Col-

lar Crime Crime?" *American Sociological Review*, 10:132-40, April, 1945; Edwin H. Sutherland, "Crime and Business," *Annals of the American Academy of Political and Social Science*, 217:112-18, September, 1941, and also articles by Jerome Hall, "Interrelations of Criminal Law and Torts," *Columbia Law Review*, 43:753-79, September, 1943, also Part II of the same article, 43:967-1001, November-December, 1943; Jerome Hall, "Prolegomena to a Science of Criminal Law," *University of Pennsylvania Law Review*, 89:549-80, March, 1941; Jerome Hall, "Criminal Attempts—A Study of the Foundations of Criminal Liability," *Yale Law Review*, 49:789-840, March, 1940.

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This paper is a description of violations of the price and rationing regulations issued by the Office of Price Administration.² The interest is primarily in the violations by wholesaler and manufacturing concerns and retailers,³ not those by consumers, or persons stealing or counterfeiting ration currency.

Since the establishment of the OPA in February, 1942, nearly 600 price and rent regulations and almost 20 ration orders have been issued. The prices of over 8,000,000 articles are regulated by this agency. Many of these regulations and orders act as controls over the behavior of almost every consumer in the United States, and almost every person engaged in business activity is governed by one or more of the specific trade regulations. This means that the regulations exercised control over 130,000,000 people, including the owners of several million rental dwellings and 2,000,000 business establishments, of which 380,000 are pre-retail establishments (wholesale and manufacturing), and the balance retail, including 600,000 food stores and 250,000 gas stations.

These new controls over business were the most drastic ever issued in this country, even though business men have long been under some regulation and have been subject to government reports. Moreover, in a nation which has long been characterized by widespread disrespect for law one had to contend with such factors as previous business practices which were legal before the enactment of the OPA, a shortage of supplies and poor distribution, a bitter attack on the OPA by

special interests, hostility of business men toward wartime regulations which they often tended to regard as New Deal measures, and discussions among themselves and in trade journals which might tend to reinforce this hostility. One also had to contend with the reluctance of certain legislative groups to give sufficient financial support to the agency for enforcement.

The public has overwhelmingly supported these controls, as shown by all surveys which have been made, the proportion favoring price control ranging from 80 to 97 per cent.⁴ Other evidence that public opinion has been in favor of the OPA is the fact that the courts in 1944, for example, decided 96 per cent of all litigation, both civil and criminal, in favor of the OPA.⁵ Further indication of public support is indicated by the active assistance of volunteer price panel members and assistants who at a single time have numbered as many as 200,000. Even business men support the government price control program, as was indicated in a 1945 survey of 434 wholesalers in fifteen cities where only one out of four thought the government was doing a poor job in controlling prices in general and one out of three thought that it was doing a poor job in their own type of business.⁶

The majority of these regulations and controls have been in effect for over three years and during this time have received extensive explanation, wide publicity, and wide newspaper coverage of prosecutions. Appeals have been made for the price control program based not only on the intellectual reasons for

² Preliminary to a volume now in preparation with the tentative title of *The Office of Price Administration and the Black Market: A Study of Government Enforcement*.

³ This paper is chiefly interested in price violations by wholesalers and manufacturers as basically these concerns are the largest and most important in our economy. Moreover, violations at this level of our economy are likely to cause subsequent violations. Thus a violation of a ceiling price by a manufacturer may be passed on to wholesaler, from wholesaler to retailer, then to consumer. It is at this wholesale and manufacturing level that the chief efforts of the OPA's enforcement department have been concentrated.

⁴ See *Public Opinion on Control of Prices, Wages, Salaries During War and Reconversion*. National Opinion Research Center, Report No. 26.

⁵ *Twelfth Quarterly Report*. Office of Price Administration. Washington: U. S. Government Printing Office 1945, p. 75.

⁶ All references to a survey of wholesalers, unless otherwise noted, refer to a survey conducted for the OPA in 1945 by the National Opinion Research Center. The survey was restricted to food wholesalers and was made in fifteen cities chosen for their regional location and their high or low sanction activity. The sample was so constructed as to give a proportionate sample of each major type of food wholesale activity according to the total number of concerns in the United States.

the existence of the regulations as inflationary controls, but also frequent appeals to patriotism as a basis for compliance, which ordinarily cannot be used to enforce law in peacetime. Members of most concerns involved had a member of the immediate family in the armed service. Studies of profits of concerns and their own statements on opinion surveys indicate the majority of them made either equal profits or actually greater profits than they made before the war and that many of the concerns involved in OPA violations were in excellent financial condition.⁷ On one national opinion survey approximately one-half of the food wholesalers reported they were making satisfactory profits. Examining the push and pull of these two sets of factors, however, one would anticipate that the positive factors might sufficiently counterbalance the negative factors so that one might not have expected quite the extensive violations of these wartime laws as actually occurred.

There has been much discussion as to whether these violations actually constitute crimes since in only a small number of cases is the issue of wilfulness raised, and in even fewer cases is a criminal sanction sought. Sutherland has correctly indicated⁸ that the essential nature of a crime is not wilfulness or even that a penalty has been imposed, but rather that the unlawful act is punishable. The crucial issue is the existence of a violation which may be followed by some sort of penalty. Jerome Hall, similarly, has advanced the thesis that the distinction between crimes and torts, and between the customary use of the term penal as opposed to "non-penal," is artificial and not logical theoretically.⁹

Following this reasoning, for criminologi-

⁷ In fact, one enforcement technique was to cooperate with the Bureau of Internal Revenue in investigating firms which did report extremely excessive incomes, on the assumption they might possibly have been derived from illegal activities.

⁸ Edwin H. Sutherland, "Is White Collar Crime Crime?" *op. cit.*

⁹ "An initial catalogue of sanctions, compiled to guide formulation of the scope of inquiry, might begin with declaratory and investitive judgments at

cal purposes, nearly all violations of OPA regulations constitute criminal acts. Violations of the Emergency Price Control Act are defined by Congress as socially injurious and a violation of law. If, in the Administrator's judgment, there is unlawful behavior he may institute court action or settle the claim. Whether the violation is handled by civil or criminal measures is the agency's decision.¹⁰ The only specific limitation is that the criminal sanction can be employed only in cases where the violation was wilful. There is, moreover, no implication that the criminal sanction will be employed in all wilful cases, thus leaving the use of alternative measures entirely to the agency. In Canada, on the other hand, where formal action is deemed necessary in the event of a price or rationing violation, all offenses are dealt with by criminal prosecution rather than by civil action, with the exception of a few cases where the license was cancelled.

one extreme, and capital punishment at the other. The difficulties would be raised by various intermediate sanctions, particularly by the so-called civil penalties, fines, punishment for contempt, sanctions applied for violation of injunctions, and those discussed above—punitive damages and penal actions. Revocation of license to engage in various activities, cease and desist orders, . . . Such matters as self-help and self-defense would need to be considered, and the totality of legal sanctions must be distinguished from the vast congeries of social sanctions." Jerome Hall, "Criminal Law and Torts," *Columbia Law Review*, 43:999-1,000.

¹⁰ Actions which may be invoked against violators of OPA regulations and orders range from admonitory warning letters to criminal prosecutions which may subject the violator to imprisonment up to one year or a fine of not more than \$5,000 or both for each violation. Between these extremes are administrative actions such as monetary settlements and civil actions such as treble damage suits, injunction suits, and license suspension proceedings. Violations of ration orders may be enforced by local board and district office revocations at the consumer level, and by administrative proceedings to suspend the privilege of dealing in rationed commodities and by injunction actions to enforce compliance with ration orders at retail and wholesale levels. The second War Powers Act provides that wilful violations of ration orders may be punished by imprisonment up to one year or a fine of not more than \$10,000 or both, for each violation.

Moreover, penalties for black market violations are punishable.

An examination of cases would show involving administrative action at other prosecutive when falsification rationing an injunction proceeding prosecution purposes accomplished the violation has shown the criminal might be considered the Justice courts to be limited.

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¹¹ Steuart Administration

Moreover, five states and some 75 municipalities in the United States have enacted black market statutes and ordinances making violations of the OPA's law a misdemeanor punishable by fine or imprisonment.

An examination of cases, including rationing cases under the Second War Powers Act, would show that in thousands of cases involving almost identical violations sometimes administrative measures have been used, at other times civil, and occasionally criminal prosecution. Cases involving evasive violation where there is definite wilfulness, such as falsification of records and inventories in rationing cases, are handled sometimes with an injunction suit, with a suspension order proceeding, and at other times with criminal prosecution. In certain cases it is felt that the purposes of enforcement would be better accomplished if an injunction is used, even if the violators' actions were wilful. Experience has shown that it would be impossible to use the criminal sanction in all cases where it might be used, since criminal cases require considerable preparation, and the capacity of the Justice Department and the federal courts to handle a large number of cases is limited.

A study of rationing suspension order cases under the Second War Powers Act, which are entirely administrative in character, would show that many of these cases, largely gasoline, involved violations which were both extensive and evasive. All rationing suspension order proceedings involve wrongful diversion of strategic supplies. It is not necessary for the OPA to prove wilfulness, but proof of wilfulness may affect the length of the suspension order. Of particular interest in this connection is the Supreme Court decision in the *Steuart Oil Company* case which upheld the validity of the suspension order.¹¹ The company maintained that it was a penalty and that the OPA did not have authority to use such penal action. It was the contention of the OPA that it was not a penalty but withdrawal of an allocation. The Supreme Court said that the suspension

order was remedial but conceded that it was an injury to the person suspended. From the point of view of criminology, however, it seems that the suspension of a business for periods ranging up to the duration of the war is a penalty regardless of the legal interpretation.

Another OPA sanction, the injunction, is used in cases where there has been a violation or to prevent future violations. It has been the major sanction and many of the most serious cases have been handled with an injunction simply because it is quickly and more easily obtained. It is particularly useful where there is a failure to keep records which is in many instances a way of avoiding the detection of such violations as side payments. In fact, several courts have objected to the use of injunctions to hide wilful violations which might be punished by other measures. It is also of interest that characteristically both a treble damage and an injunction suit for past violations are used, the treble damage suit being definitely penal in nature.¹² The court has held that an injunction does not follow in all cases where a violation is shown. Thus in the *Hecht* decision,¹³ where the defendant had made every effort to comply with every regulation, even though there were extensive violations, the Supreme Court stated that the court did not have to grant an injunction as it would not accomplish any further purpose. Injunctions have been and continue to be granted, however, in cases where wilfulness is not raised.

Two other sanctions which the OPA has available for price violations are the license suspension and treble damage suits. The former is considered suitable for serious cases and is used only after at least two violations have occurred over a period of time. A formal

¹¹ *An injunction without treble damage action to recover the amount of the overcharge is analogous to serving a hypothetical injunction on a bank robber as he comes out of a bank with his loot, to cease and desist from further violations but allowing him to retain the stolen money. Many injunctions, which prevent the possibility of future violations, are similar in nature to serving an injunction on a bank robber as he goes into a bank to rob it.*

¹² *The Hecht Company vs. Bowles, Price Administrator, 321 U.S. 321 (1944).*

¹³ *Steuart and Brother, Inc. vs. Bowles, Price Administrator, 322 U.S. 398 (1944).*

license warning notice must be issued after the first violation and there must be another violation before this sanction can be instituted. The treble damage actions are of three types; the Administrator's own, for violations in the course of trade or business, the Administrator's consumer suit, where the Administrator sues to recover for a violation at the retail level, and the suit where the consumer himself sues for treble damages. The first two suits are considered penalties, whereas the latter suit is considered largely as a remedial action, particularly if the recovery is only for the single amount of the overcharge. The penal nature of the treble damage action is recognized by the fact that no money paid to the United States Treasury as the result of a treble damage settlement or suit brought by the OPA can be deducted as a business expense under the Internal Revenue statutes. In the case of all treble damage suits Congress has differentiated between violations which were not wilful and negligent and those which were wilful or negligent. If the defendant is able to establish the former contention only the single amount of the overcharge can be awarded. The defendants have not been very successful in establishing this so-called "Chandler defense," since the courts usually do not consider it if the OPA later shows that there were side payments, falsification of records, tie-in sales, and other violations demonstrating wilfulness, or if there was an absence of proper records, failure to instruct employees, and other similar violations.

While it has already been indicated that the question of wilfulness is not essential in order to judge violations of price and rationing regulations as crimes, it might be well to point out the extent to which violations are intentional. Since most regulations have been in existence for several years and have been accompanied by wide publicity both in newspapers and trade journals it appears unlikely that many business men, after the initial period of price control, could be ignorant of the provisions of the regulations. Estimates by a group of wholesalers in 1945 show that one-third believe most violations to be deliberate. More specifically, ten per cent felt

that everyone violates deliberately, 14 per cent estimated over three-fourths, and another 11 per cent felt that more than half of all violations were deliberate. Perhaps an even more empiric index is the extent of evasive violations such as falsification of records, including those in connection with side payments. When a violation is evasive there can be no question but that it was intentional and that the person was familiar with the provisions of the regulation, as well as the nature of the investigations, at least enough to try to cover it up. Of the group of food wholesalers interviewed in 1945, more than one out of five thought this to be a frequent practice. Moreover, 57 per cent of the wholesalers interviewed in this same survey stated that enforcement efforts are effective in securing compliance, which would indicate awareness that many of the actions described here are intentional violations of the law.

Even when violations of government regulations are intentional many business men, while they may regard themselves as law violators, do not consider that they have committed crimes and, therefore, could not possibly be treated as criminals.¹⁴ Some representative statements of this view are the following by food wholesalers.

"I sure wouldn't think any man should go to jail for a price violation." (Grocery dealer in St. Louis)

"I don't think jail is good. That's for hoodlums and gangsters." (Grocery dealer in Chicago)

"It would be a terrible thing to go to jail, pretty hard for a man's family, too. Jail is for racketeers. That is just another day for them but very different for a legitimate business man." (Fruit and vegetable dealer in Los Angeles)

While this attitude was by no means unanimous among business men, as shall be indicated shortly, this view is general enough

¹⁴ To reason that because some business men do not approve of the law, and, therefore, see no reason for obeying it seems little more valid, from the standpoint of protection of society in general, than to state that because some criminals of the lower socio-economic class do not approve of some criminal laws they can violate them.

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to make it obvious that among many of the business group the mores are not involved in such violations. Such laws are *malum in prohibita*, and the force of public opinion has as yet not been sufficiently developed to make such laws *malum in se*. In fact, the great extension of modern criminal law has come in those fields where there is no unanimity that such behavior is criminal either on the part of the general public or the important classes or groups involved.¹⁵ Actually the injury to society is far greater in many of these crimes, which may involve several hundred thousand dollars, and the example of disobedience of law is far more flagrant than in the case of most ordinary crimes. Perhaps, as Fuller has suggested, enforcement of the law and education as to its purpose will bring about greater consensus in society that crimes committed by business men are as much crimes as those of the lower socio-economic class.¹⁶

In connection with the criminal prosecution of business violators, against whom the OPA probably brought more cases than other agencies, the attitude of the courts is most important. While the opinions of the courts are undoubtedly the reflection, in part, of public opinion in general, or the opinion of certain social classes, at the same time the attitude of the community toward certain laws, particularly new laws, is influenced by the attitudes of its judges.

Most OPA criminal cases were generally well selected before being turned over to the Department of Justice for prosecution, as is indicated by the fact that convictions were secured in over 94 per cent of the cases in 1944. Yet the sentences imposed on OPA violators after conviction were in general extremely mild. For example, during the year 1944, of 3,486 persons who were convicted of violations of the price and rationing regulations, only 27 per cent received imprisonment or imprisonment and fine. Of the total convicted, 46 per cent received only a fine, and

28 per cent were placed on probation. During the fiscal year ending June 30, 1944 only 470 persons were received in Federal prisons for price and rationing violations. Of the total group 97 received a sentence of a year and a day or more. Only 80, or 17 per cent, were sentenced for price violations, of whom one-fourth received sentences of a year and a day or more. One reason for the light sentences was the attitude toward offenses of this type, but still another reason was the fact that the offenders seldom had a criminal past or other circumstances which would warrant a severe sentence. As the judges on occasion stated from the bench, they "would not make criminals of reputable business men."

The length of some of the sentences imposed on business men who had wilfully violated the OPA regulations and in so doing made large sums of money were almost trivial compared with the sentences given offenders who violate ordinary criminal laws pertaining to property offenses. Of course, because of their reputation, a short sentence may be as effective with business men as a long sentence with lower class criminals. Likewise, a large fine may be more difficult for an ordinary criminal to pay than for a business man, and the former might conceivably prefer a short imprisonment to such a large fine.

While this method of dealing lightly with violators who had no previous record may be in line with advanced criminological theory, it raises certain questions, also from the view of society in general, that the penalty of imprisonment which was the most feared by business men according to their own statements was so seldom invoked as a deterrent for others. A survey of wholesalers' opinions revealed that they considered imprisonment a far more effective penalty than any other OPA action, including fines.¹⁷ In fact, some 65 per cent made this statement.

¹⁵ R. C. Fuller, "Morals and the Criminal Law," *Journal of Criminal Law and Criminology*, 32:624-30, March-April, 1942. See also E. H. Sutherland, "Is White Collar Crime Crime?" *op. cit.*, p. 139.

¹⁶ R. C. Fuller, *Ibid.*, pp. 629-30.

¹⁷ This opinion is further supported by a survey of OPA district enforcement attorneys who reported that where sentences were generally adequate observance of regulations was best, and a converse situation existed where sentences were inadequate.

Some of the comments are illustrative of this view. About jail sentences they had this to say:

"Jail is the only way: nobody wants to go to jail."

"Everybody gets panicky at the thought of a jail sentence."

"A jail sentence is dishonorable, it jeopardizes the reputation."

"It (jail) spoils the offender's reputation and frightens the other fellow."

With regard to fines and other money penalties business men¹⁸ had this to say:

"They don't hurt anybody."

"They're never missed."

"People are making enough money nowadays to pay a fine easily. It just comes out of the profits, like a tax."

"The violators violate again, so they must not care about paying a fine."

Total violations of OPA regulations by business concerns, both retail and pre-retail, has undoubtedly been a large figure. Violations of this type uncovered during 1944 alone numbered 338,029. This figure represents violations by approximately 11 per cent of the business firms of the United States.¹⁹ The number of food dealers found

¹⁸ In 1945 approximately 2,500 housewives were asked what the government should do with retailers who intentionally violated price regulations. Slightly over one-third (37 percent) thought they should be fined, 8 percent would give them a jail sentence, 21 percent would make them close their stores for a while, and 12 percent would make them pay up to three times the amount of the overcharge. Office of Price Administration, *Opinion Briefs*, No. 7, April 12, 1945 (Mimeo).

¹⁹ This includes only cases of the OPA Enforcement Department. Many cases were investigated by price panel volunteers of the Price Department who took action without referring cases to the Enforcement Department. Rent cases, and practically all consumer cases, are not included in any of the figures. Also not included are the large number of private treble damage suits brought by consumers against dealers, nor the majority of prosecutions under local legislation of which there are no accurate records. In New York City alone in 1944 there were 18,875 prosecutions of retailers by the New York Department of Markets, and the Sheriff's office in the three months' period during January 15, 1945 prosecuted over 4,000 wholesale dealers.

in violation was 197,799, including 62,382 meat and dairy dealers. Apparel concerns found in violation were 17,848.

The estimates of about one out of ten business concerns in violation is undoubtedly too low because not all concerns were investigated. Of those investigated approximately 57 per cent were found in violation, which, if applied to the total concerns, would be approximately 1,100,000 violations. On the other hand, this figure may be too high because the fields of business selected for investigation by the OPA are likely to be those in which there is more evidence of violations than in the case of other business fields,²⁰ and there may also be some duplication of business concerns in the above figures.

During 1944 there were actions in 322,131 cases of violation. Warnings or other informal adjustments, including dismissals, were issued in 271,874 cases or 84 per cent of the total cases. In the remaining 16 per cent of the cases administrative action was used in 26,763, and court proceedings were instituted in 28,903 cases. Of these 55,666 cases, representing some 3 per cent of all business establishments, there were 10,504 or 19 per cent settlements, and 2,745 or 5 per cent suits, in treble damage cases against manufacturers and wholesalers,²¹ 6,171 or 11 per cent settlements, and 1,373 or 2 per cent suits, in treble damage cases against retailers, 10,088 or 18 per cent ration suspension order proceedings, 13,074 or 23 per cent injunction suits, and 145 or .3 per cent license suspension suits for price violations. There were 2,223 or 4 per cent suits brought by the OPA under local legislation, and criminal

²⁰ For other estimates of the extent of violations of OPA regulations see George Katona, *Price Control and Business*, Cowles Commission for Research in Economics, Monograph No. 9. (Bloomington: 1945), pp. 47-48 and 57-58.

²¹ Complete data on manufacturing and wholesale cases were not available for 1944, but on the basis of data for part of 1945 some 12 per cent of all concerns were found to be in violation and approximately 70 per cent of the concerns investigated were found to be in violation. Approximately 20 per cent of all injunctions and 18 per cent of the criminal cases were instituted against wholesale and manufacturing concerns.

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prosecution was begun by the Department of Justice against 3,934 defendants or 7 per cent.²² In 1944 \$21,000,000 was collected in treble damages and fines.

The extensive volume of these cases can well be illustrated by comparing the number of enforcement cases of the OPA with those of other federal agencies. Without doubt the OPA has brought more actions, including more court actions, against violations by business men than all other federal regulatory agencies, with exception of the Bureau of Internal Revenue, in the past ten years.²³ In fact, approximately one-half of all civil cases in the federal courts during 1945 were for violations of the price, rationing, and rent regulations, and nearly one-sixth of all criminal cases were for such violations.²⁴ The Securities and Exchange Commission during the ten-year period 1934-1944 annually brought court action in only an average of 85 cases, 51 being civil actions and 34 (232 defendants) being criminal prosecutions by the Department of Justice.²⁵ The Federal Trade Commission²⁶ in 1944 dealt with about 900 violations of which less than five per cent involved court proceedings. The Food and Drug Administration²⁷ annually

brings action against some 3,500 concerns, filing injunctions in about 35 cases and using criminal prosecution in 380 cases, 91 per cent of the convictions resulting in fines only. In view of the limited enforcement staffs of these agencies these figures probably do not show the extent of the actual violations. The OPA has a much larger enforcement staff, consisting of over 3,000 investigators and 600 attorneys in addition to volunteer assistance, and while inadequate to investigate several million business concerns it has had a staff much larger than any agency other than the Bureau of Internal Revenue. The large number of court actions brought by the OPA was also a reflection of a stronger policy in dealing with business violators, a policy that was in part made possible by the fact that it was a war-time measure.

Analysis of several thousand price violations indicates that they may be classified into a number of different types²⁸ in much the same fashion as violations of the customary criminal law can be classified. Because of the extent of these wartime controls there is latitude for considerable variation in types of violation. The absence of previous experience with wartime regulatory measures restricting the economic life of the entire population indicates that patterns of violation have developed in a relatively short period of time. The majority of violations of price regulations are by the seller rather than the buyer. This is so because under the provisions of the Price Act a buyer for ultimate consumption may not ordinarily be a violator and from the further fact that the initiation of a price violation ordinarily originates with the seller. Violations by a seller fall into three main types: (1) direct violations in the form of straight over-ceiling charges, including over-ceiling purchases in the course of trade or business when such practices are for-

²² During 1944 Canada prosecuted 7,274 persons for price and rationing violations, of whom 2,493 were for price violations.

²³ The estimated annual grand total of all OPA violations, including consumer, rent, retail and pre-retail which is approximately 900,000 is equal to the total crimes known to the police which is also approximately 900,000. *Uniform Crime Reports*. Semi-annual Bulletin, Vol. XV, No. 1, Federal Bureau of Investigation, United States Department of Justice, Washington, D.C.

²⁴ *Annual Report of the Director of the Administrative Office of the United States Courts*. United States Government Printing Office. Washington: 1945.

²⁵ *Tenth Annual Report of the Securities and Exchange Commission*, Fiscal Year Ended June 30, 1944. A Ten Year Survey, 1934-1944. United States Government Printing Office. Washington: 1944.

²⁶ *Annual Report of the Federal Trade Commission*, for the Fiscal Year Ended June 30, 1944. United States Government Printing Office, Washington: 1944.

²⁷ *Annual Report, Food and Drug Administration*, for the Fiscal Year 1945. United States Government Printing Office. Washington: 1945.

²⁸ A similar classification has been made of rationing and rent violations but is not included here. For other classifications of white collar crime see Edwin H. Sutherland, "White Collar Criminality," *op. cit.*, p. 2, *Tenth Annual Report of the Securities and Exchange Commission*, pp. 143-146, and 1944 *Report of the Federal Trade Commission*, pp. 38-44 and 57-59.

bidden, (2) indirect over-ceiling sales involving the use of evasive practices to cover up the violation and to hamper detection of a violation, and (3) violations of record-keeping and reporting requirements. Price violations by the buyer, in those regulations where such behavior is prohibited, are derivative in the sense that the seller ordinarily initiates the transaction. Even assuming the purchaser to be a willing buyer, if he pays a price above ceiling he must pass on the overcharge, provided he is not the ultimate consumer and does not wish to sell at a loss.

It is unnecessary here to give examples of the first type of price violation. Examples of the second or evasive type of price violation are numerous. One practice is to secure cash payments in addition to those which appear to have been made in the regular transaction at ceiling price. These "cash-on-the-side" payments are not recorded or reported and are oftentimes difficult to ascertain unless the buyer "talks." The invoice is made out at the correct ceiling price and from all that appears on the buyer's records no price violation took place. Often charges are made for goods which are not actually delivered. Often side payments are treated as a loan which the seller in fact never repays to the buyer. In other instances it has been disclosed that side payments are received and covered up by the seller placing one of his employees on the payroll of the buyer to draw a salary for services which are actually not rendered. There have also been instances wherein sellers have refused to supply certain commodities to purchasers unless they agree to buy stock in corporations in which the sellers are interested. The stock, of course, is worth only a small fraction of the price paid. Those buyers who become stockholders are plentifully supplied with wanted commodities at what appear to be ceiling prices. Still other side payments are in the form of patronage dividends. Extra charges also consist of gifts, tips, bets, bribes, kickbacks, and fictitious quantity estimates. Occasionally charges are made for delivery or other services not formerly performed or previously performed free, charges made for fictitious legal or brokerage services, and pyramiding of mark-

ups through dummy jobbing concerns.

A further evasive method devised to violate price ceilings is through the use of "tying" agreements. This practice consists of making the purchase of an unwanted commodity the condition of purchasing a desired commodity. The seller will refuse to deliver the desired commodity unless a purchase is made of a product for which there is little or no demand or upon which his margin of profit is high. Tie-in sales may be direct in their nature in that the purchaser is specifically given to understand that he cannot purchase the wanted commodity without purchasing the less desirable product, or they may be indirect in those instances where word is passed out to the purchasers that it is desirable that they order and purchase products other than those wanted.

Still another type of evasive practice is that involving quantity or quality violations. In such cases there may be a shortweight of the commodity. Other cases may involve grading violations, such as upgrading, failure to grade, or improper labeling of the commodity. In some instances there is reduction in size or inferior composition or construction, such as the use of substitute materials of inferior grade, blending with less expensive grades of materials, reduction in amount of materials used, and decrease in length of guarantee periods.

The third type of price violation, record-keeping and reporting violations, does not in and of itself directly affect prices charged or received and is, therefore, classified as non-substantive. This type may be further broken down into those which involve simply failure to comply with records and reports requirements and those where there is neglect or intentional refusal to comply in order to cover up substantive violations. The purpose of these requirements is to aid the public and the OPA in enforcing price ceilings. Violations of these requirements permit the seller to evade detection of his substantive violations and hamper the public and the OPA in their enforcement activity, since it is often difficult, if not impossible, to tell what the seller's maximum prices are unless proper records are kept. Investigations indicated

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that the records of many business men have not been adequately kept even in peacetime. It was largely for this reason, as well as prevalence of evasive violations, that base period pricing methods such as the General Maximum Price Regulation (GMPR) were very difficult to enforce.

There are indications, both from studies²⁹ as well as reports in trade journals, that nearly all types of these violations were frequent, although there were considerable variations from industry to industry. A national survey of wholesalers' opinions in 1945 as to the frequency of various type of violations indicates that the most frequent violation, in their opinions, involves tie-in sales, second in importance was selling above ceiling, third was falsification of records including side payments, and fourth was quality deterioration. The frequency of tie-in sales, exceeding even selling above ceiling, is probably indicative of enforcement activities which drove under cover the more open violations. Evasive violations are more difficult to detect. Of the wholesalers interviewed 38 per cent contended that tie-in sales were frequent, 27 per cent thought that selling above the ceiling and quality deterioration were frequent, and 22 per cent felt that falsification of records including side payments was frequent. Many wholesalers, however, contended that tie-in sales and quality deterioration were more or less accepted practices in the trade during peacetime.

Actually a large proportion of OPA violations are various types of fraud, as they constitute devices for obtaining money fraudulently by misrepresentation. Certainly the delivery of goods in which the quantity or quality is not the same as the invoice specifies is fraud. Even if the OPA statute was not in existence, in many cases where lack of good faith in the contract action could be shown there would be the right of recovery under existing state and federal laws.

This wide-scale violation of law requires some systematic explanation. If this behavior is called criminal, as we have contended it is,

such an assumption discounts traditional ways of explaining crime on the basis of such factors as heredity, feeble-mindedness, poverty, race, immigrant background, and probably psychopathology.³⁰ Moreover, studies which show that offenders are generally youthful are invalidated by the fact that offenders of this type are generally middle-aged. In fact, it may be assumed that such offenders are likely to be of a higher educational level and usually married, so that neither the fact of education nor marital status would appear to be important in connection with such criminal behavior.

Assuming that such behavior does require explanation, several may be advanced. It is not the intention of this paper to make definitive answers, but rather to suggest several lines along which further research can be carried out. The most obvious approach is situational. The assumption may be made that business men are alike as to personality and what makes one individual violate rather than another is the pressure of profits and supplies.³¹ Fortunately there is one study³² which suggests tentative answers to this question. As the result of interviews with several hundred producers and distributors of consumer goods it was concluded that sales and profits were not related to price violations. On the other hand, an acute shortage of supplies, irrespective of sales, contributed to price increases.³³

Another situational approach is the contention that large firms comply with the regulations and small ones do not. It has been suggested that large firms consider their reputations, are aware of their social responsibility, employ so many persons that violations could not be kept secret, are more frequently and thoroughly investigated by the OPA, and have large staffs to become

²⁹ See also Edwin H. Sutherland, "White Collar Criminality," *op. cit.*

³¹ In this regard a comment by a non-processing meat slaughterer is interesting. "When I sold to black markets I couldn't sleep at night; since I comply (summer, 1943) I can't sleep at night because I am losing money." George Katona, *op. cit.* p. 47.

³² George Katona, *op. cit.*

³³ *Ibid.*, p. 141.

²⁹ For example, see George Katona, *op. cit.* and the various studies of the Bureau of Labor Statistics.

familiar with and explain all regulations. Small firms, on the other hand, are thought to have little reputation to lose, do not keep adequate records and, therefore, could make frequent cash transactions which might involve violations, and are not as frequently investigated by the OPA. However, a survey which sought an answer to this particular problem among Chicago business concerns, while inconclusive, suggests that size of the firm alone does not appear to be an important factor in violation.³⁴

A second type of explanation is one which may be termed differential association. This explanation implies that the person has acquired certain anti-social norms through association with other persons which predispose him to violate the law. Such differential association may be of three types. It may involve persons who have had a previous criminal record or those who have been associated with persons previously engaged in criminal behavior. Other differential association may rather have been confined to acquiring knowledge and experience with unethical or illegal practices of the business world. Sutherland has suggested³⁵ this as a general explanation of white collar crime and, more specifically with reference to OPA violations, has stated his opinion that

In general, this seems to me to be fairly well in accord with the theory of differential association; not that the local grocer or the customers of that grocer violate these regulations by associating with gangsters, but that they violated the regulations (a) because they had, prior to enactment of the law, contact with such patterns of behavior and a whole organized set of customs and attitudes in connections with them, and these continue to operate after the law declares the practices to be illegal; (b) because specific stimulations and techniques are acquired from others who are violating the law.³⁶

³⁴ George Katona, *op. cit.*, p. 129.

³⁵ Edwin H. Sutherland, "Crime and Business," *op. cit.*, p. 116.

³⁶ Extract from letter to author, August 6, 1945. Reviewing Lever and Young's *Wartime Racketeers*, Sutherland has suggested that if enforcement of new regulations could be started promptly, the development of many new patterns of violation could be prevented. *American Sociological Review*, 10: 817-18, December, 1945.

A third type, closely related to the previous one, is the development of sufficient negative attitudes toward the OPA and government regulations which are so reinforced by similar beliefs of other business men that the regulations are not considered legal.

The first type of explanation which traces price and rationing violations to association with previous criminal norms is rather widely held, particularly among the general public. The idea became widespread due primarily to an unfortunate publicity policy in the early days of the OPA which had as its purpose awakening the public to the dangers of price and rationing violations. Statements were issued that organized racketeers were engaging in black market activities and there were a large number of articles in magazines and newspapers, as well as motion picture shorts, which described such cases. The term black market itself became almost synonymous with organized criminal behavior, whereas actually it should be used more correctly to describe any price or rationing violation whether in legitimate channels such as ordinary business or otherwise. Even business men appear to have been influenced by such stories, for in interviews they will occasionally refer to a mysterious black market. Actually, with the exception of one type of activity, there appears to be little evidence of any organized criminal underworld engaging in price and rationing violations. The one exception has been the theft and counterfeiting of ration currency which has been largely a field of professional criminal activities. Contrary to popular impression, a relatively small percentage of offenders have any previous criminal record, exclusive of traffic violations, although it is possible that many business men may have engaged in white collar criminality for which they were never prosecuted. If we consider price and rationing cases involving criminal prosecution, which probably represents a sample of more flagrant OPA cases, we find that only about one out of ten are reported to have had a criminal record. Of those imprisoned, which may or may not represent the more serious cases, although

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they are more likely to have been more serious than those who were fined or placed on probation, only about one-third have criminal records. Those prosecuted criminally are chiefly violators of the rationing orders including dealers who violated the rationing provisions, as well as those who stole or counterfeited the currency. A relatively few persons have been prosecuted for price violations, and the proportion who have a criminal record is even smaller. It is likely that one reason why such a small number of persons have been prosecuted for price violations is the fact that few persons of this type have previous records of criminal behavior and this makes the possibility of conviction difficult.

The fact that business men have been associated with others who have engaged in customary business practices of a quasi-legal character appears to have some partial validity in explaining violations. In some businesses, such as gasoline and apparel, it appears to be more important than in others. Such an etiology appears to be typical of certain marginal operators who have come into the business to make a quick fortune.

While it is likely that many cases of violations of price and rationing regulations, where there has been continuous and intimate association with differential norms, can be satisfactorily explained by a theory of differential association, there are several limitations in such a general theory. Without going into great detail, a few major objections may be briefly stated. Such a theory does not adequately explain why some individuals who are familiar with the techniques of violation, as well as frequently associate with persons similarly familiar, do not engage in such practices. It is doubtful whether any business man can participate in a given line of business for any length of time without acquiring a rather complete knowledge of practices in his trade. Certainly besides talking with competitors and customers he has ample opportunity to read of techniques of violations in newspapers and trade journals. It is difficult to explain, therefore, the fact that thousands of business concerns, even in those commodities where

one expects less group ethics, appear to comply fully with the regulations.

A second criticism of differential association is that the behavior is accounted for in terms of a single role that the person is playing, which in this case is the role of a business man. The same individual may play a variety of roles, and behavior such as that involved in violating a law may well involve an integration of several different roles. In the case of offenders of the lower socio-economic classes there is likely to be more similarity in the behavior of different roles in which the person is engaged. When we are considering offenders of the white collar class there is probably less similarity in the several roles. Still another difficulty in differential association as an explanation of behavior is that the theory tends to over-emphasize the more recent developments in the individual's personality rather than the importance of early behavior patterns in the formation of personality. These early behavior patterns may well be important enough to counterbalance later association with criminal or anti-social conduct.

Finally, the theory of differential association does not allow sufficiently either for independent invention of a complex technique or the need for acquiring any technique for violations which are extraordinarily simple. The validity of this particular statement should, of course, be ascertained by further detailed study of a number of cases. Certainly many OPA violations involving similar techniques have appeared in isolated areas. In many violations only a single person appears to have been involved. There appears, for example, to be ample evidence that rather complex evasive violations of rent regulations have appeared in relatively isolated areas, and they appear to have been independently devised, since there is ordinarily little association among landlords.

Some suggest the explanation that compliance is determined by whether attitudes of business men are in favor of, intermediate, or hostile to price control, the origin of which may be sought in their attitudes toward past profit trends, profit expectations, price expectations, long-range considerations, fair-

ness of the regulations, and certain misconceptions which they may have had about the purposes of price control. A survey of Chicago manufacturers and distributors shows that when attitudes toward price control are cooperative there are less violations, and when they are hostile there are likely to be more violations.³⁷ The results, however, indicate that attitudes do not appear to be the cause of violations, but rather only one element of a larger situation.

It appears that there can be no single explanation of OPA violations. They are not the result entirely of either supply and demand, profits, or types of business. Likewise, violations do not appear to arise to any degree out of contacts with criminal conduct norms or result from negative attitudes towards the OPA. Differential association with deviant norms of the business world explains some cases but not all, nor does it explain why some engage in such activity while others do not although they have had extensive differential association. These cases of white collar crime offer an excellent opportunity for examining the life organization of violators to ascertain what set of factors make for conformist and non-conformist behavior. Why is it that some business men who have been presented with numerous opportunities to violate do not do so while others with only limited opportunity have readily violated?

Solution of this problem appears to be in

³⁷ George Katona, *op. cit.*, p. 170.

the individual's personality pattern. There may be psychogenic characteristics, general reaction patterns such as disregard for the rights of society in general, or basic attitudes such as attitudes toward law and the importance of reputation which were developed in the early years of life. These may be a result of the different integration of the several roles which each individual plays in society. As Sellin states, "An important function of etiological research is, therefore, the formulation of generalizations which permit us to differentiate the violator from the conformist, in terms of personality structure or growth process."³⁸ Besides Sellin, Sutherland³⁹ and Dunham and Lindesmith⁴⁰ have suggested that this is one of the most crucial issues in criminological research. Perhaps before finding an answer to this question criminology will have to wait on further understanding of the nature of personality differences. The life histories of violators of wartime regulations offer us an opportunity for some preliminary conclusions as to why persons do not conform to law.

³⁸ Thorsten Sellin, *Culture Conflict and Crime*, Social Science Research Council, New York: 1938, p. 40.

³⁹ Edwin H. Sutherland, "The Relation Between Personal Traits and Associational Patterns," contained in Walter Reckless, *The Etiology of Delinquent and Criminal Behavior*, Social Science Research Council, New York: 1943, pp. 131-138.

⁴⁰ A. R. Lindesmith and H. W. Dunham, "Some Principles of Criminal Typology," *Social Forces*, Vol. 19, March, 1941, pp. 307-314.

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FREE ENTERPRISE AND FULL EMPLOYMENT

HENRY PRATT FAIRCHILD

New York University

IT is inconceivable that any one should not want *full employment*, or at least should express his dislike openly. The wage earner wants it, because it means the maintenance of his standard of living. The business man wants it, because it means the continuous operation of his productive unit. The general public wants it, because it means an unbroken and maximum flow of the goods and services upon which it depends for the maintenance of the "good life." True, there may be a small number of moss-backed, case-hardened industrialists who would welcome a constant pool of unemployed as a means of breaking down labor resistance and keeping wages low. But in these days they are not likely to say much about it in public.

It follows that those who are now opposing proposals to insure full employment, by legislative or other measures, must do so because they object to the means rather than the end. Almost invariably the means that are opposed represent an extension of governmental (usually federal) activity or authority, and it is upon this that the objections are based. This would seem to indicate that governmental measures to secure full employment are deprecated either on the ground that they would not be effective for the purpose indicated, or else that the extension of governmental activity into the field of business is so abhorrent in itself that it is worth avoiding even at the high price of depressions, business failures, and untold human suffering and degradation.

For it is very generally admitted today, not only by far-seeing liberal leaders like Henry Wallace, but also by intelligent business men and the orthodox economists who are their theoretical mentors and practical protagonists, that free enterprise by itself cannot guarantee full and continuous employment for the total working force of such a highly capitalized country as the United States. Even the most assured and vociferous

exponents of the "leave everything to free enterprise" school would hardly want to back up their protestations with an ironclad promise not to go running to the government for relief should a blue Monday arrive, nor even to accept the assistance voluntarily offered by a paternally-minded administration. The "business cycle," with its recurrent extremes of boom and depression, is now recognized by the more emancipated of the conventional economists as an unavoidable feature of a capitalistic, or price-and-profit, system. This relationship is accepted with varying degrees of complacency or resignation by those who regard the capitalistic system as the perfect flower of social evolution and cannot conceive that any other arrangement could possibly be on the whole preferable.

Explanations of the process, and of its manifestations, vary. Some students find the central cause in the essentially unworkable and paradoxical character of the price-and-profit system itself. It has been conclusively demonstrated,¹ that monetary profits on a society-wide scale are a physical and mathematical impossibility. Even some writers of essentially orthodox economics textbooks admit this, as, for example, Gemmill and Blodgett when they say that, "In the long run, therefore, we expect to find that the profits of a competitive industry just about balance the losses of that industry."² Mr. R. H. Doane, in his book *The Measurement of American Wealth*, has demonstrated the proposition by the statistical approach, showing by carefully correlated figures that over the long stretch of time the profits of American industry as a whole are almost precisely balanced by the

¹ As, for example, by the present author in his books *Profits or Prosperity?* and *Economics for the Millions*.

² Paul F. Gemmill and Ralph H. Blodgett, *Economics: Principles and Problems*, p. 384.

losses. It would be obviously out of place to attempt a full demonstration of this point in the present connection, and even if it were done the great majority of readers would be no more likely to accept the conclusion as a practical guide to conduct than in the past. Faith in the "free enterprise" system as God's great gift to economic man is deeply ingrained in the American consciousness, and attempts to discredit it theoretically are regarded as futile or impious, just as attempts to overthrow it are considered pernicious or subversive. Other explanations lay special stress on undue saving, overinvestment, and other seemingly unavoidable features of the existing system. Of these an excellent example is the recent book by Gordon Hayes, *Spending, Saving, and Employment*.

But whatever the explanation, it is practically true that the question as to whether free enterprise can be relied upon to provide full employment may be constructively pursued on the assumption that it can do so only if society is prepared to pay the inevitable heavy price, including extensive governmental interference. (Read "assistance" in extreme cases.)

The real nub of the problem, then, becomes a question of what kinds and degree of governmental intervention are necessary to produce full employment, and whether the best of them will prove adequate to the result.

As is frequently the case in controversies of this kind, much of the confusion, and some of the disagreement, arise from lack of definition of the terms and of precision in the use of them. Obviously, neither of the phrases in the title of this article means exactly what it says. "Enterprise" has a definitely restricted connotation, and in that connotation enterprise is not, has never been, and never will be "free." Business in every modern country is hedged about with a thousand and one limitations and restrictions, legal, conventional, and institutional. Not even the most individualistic businessman would expect, or want, to have all, or many, of these limitations removed. The "freedom" contemplated in the current use

of this stereotyped phrase means the ability of persons (natural or legal) to do two major things: the ability to own and operate one's own business; and the ability, in the course of that operation, to make one's own contracts, specifically as to prices and wages; both these abilities subject to no more government "interference" than already exists, or preferably less. In its application to the subject matter of this article it means particularly the ability to hire and fire at will.

Likewise, "full" employment does not mean the employment of every member of the community, or of every able-bodied member, or of every adult able-bodied member. There are numerous members of the community who are not supposed to be "employed" in the sense of this phrase; married women in the United States, for instance. Who these excluded groups are is a matter of the mores, and differs radically in different societies; the United States and the Soviet Union, for example. And "employment" in this connection is a very complicated, even technical, word. It does not mean just being busy, nor even just being busy at work. Practically it means being busy at work for somebody else, that is, being hired and receiving wages. But even this does not define it sufficiently. Being busy at what kind of work, being hired by whom, and at what wages, and under what conditions? A recent writer in the *New York Times* went to great pains to exclude from the ranks of the "unemployed" those who do not want to work. In a time of acute paper shortage it should not have been thought necessary to waste valuable space on such a commonplace. Every sensible definition of unemployment makes it clear that the idleness must be "enforced or involuntary." But the wish or willingness to work is not a simple yes-or-no proposition. Employment does not function in a vacuum, and the willingness to work can be defined and determined only in consideration of the conditions of work. A skilled mechanic can not be charged with not wanting to work if he refuses a job at twenty cents an hour, or for fifty-five hours a week without overtime, or in a factory with unguarded machinery, or for a company that

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denies him the right to belong to a union. Every workable definition of employment or unemployment must take into account certain normal expectations of the society to which it is intended to apply.

Suppose, then, for the purposes of the present discussion, that we adopt the following definition: Full employment is voluntary remunerative activity on the part of the entire normal body of wage-earners at normal wages, during normal working hours, and under normal working conditions. The next question is, what are the factors that determine whether such a condition shall prevail or not?

Since by definition we exclude all those who do not want to work, it follows that the determination as to whether full employment shall exist or not rests with the employers. So the question narrows down to: under what conditions will employers wish to hire all the available labor, and under what conditions less than all? But immediately we recognize that employers are subject to the same expectations of normality as workers. Many an employer would hire a thousand workers if he could get them for fifty cents an hour who will not take five hundred at a dollar an hour. An employer can complain that he is suffering from a labor shortage only if he is willing to comply with the standards that society has set for his particular business. But the crucial fact remains that the immediate decision as to employment lies in the hands of the employers. That is implicit in the essential meaning of free enterprise. No businessman would consider himself "free" if he were forced to hire workers he did not want, or to lay off workers that he did want, within the framework of normality. The private-property conception of business is still dominant in the mores.

Why, then, do employers hire laborers, and why do they fire them? The answer, in its broad outline, is simplicity itself. In a price-and-profit system, employers hire laborers because they believe they can make a profit out of them and they fire them just as soon as it appears that their continued employment will not be conducive to maximum profit. Both of these processes, it may

be observed, can be carried out at very short notice. Labor is the only one of the four basic factors of production (of which the other three are land, capital, and management) which has no time limit in its agreement with the businessman. The movement for a guaranteed annual wage, which has made such strides during the past few years, represents a recognition of this discrepancy and an effort to correct it. Its wide-scale adoption would doubtless be an important factor in promoting business stability, but that is still mainly a matter of the future.

Now profit, and the expectation of profit, are inextricably tied up with the business cycle, which, as we have seen, is a recognized and accepted feature of the free enterprise system. It is expected that the individual businessman will conform his hiring and firing practices to the periodic phases of this cycle. Any employer who kept on paying full wages to his entire working force as the possibility of profits vanished (as a few of them do, but not for "business" reasons), far from being hailed as an exemplar to the fraternity, would be branded as a fool and an incompetent. Particularly if he were the manager of a corporation he would be regarded as a traitor to the stockholders, and would summarily lose his job. All the leading contemporary schemes for "full employment" expect just such a situation to arise in the more or less proximate future, and most of them propose that the government shall then step in and in some way or other supplement the demand for labor so that no one shall lack the opportunity for a job at reasonable wages. In brief, the government shall stand ready to become an employer on an increasing scale proportioned to the decrease of "normal" labor demand on the part of profit-seeking private employers. Of course, this is an implicit admission that free enterprise by itself can not provide continuous full employment.

So the inquiry now turns to consideration of the government as employer. At the outset, there is the obvious assumption that the government can hire people, and keep on hiring them, when private industry can not and will not. Back of this is the corollary

assumption that the government does not need to make profits, and will keep on hiring labor when there are no profits, even when there are losses. For there is no reason to assume that, in a price-and-profit economy, government can run businesses at a profit when private owners can not (though sometimes it does). But since the purpose of all these schemes is to provide the workers with a steady income, it is also obvious that the government must have money, enough money to pay all the wages that private industry would pay if it were running at full blast. Where is this money to come from?

There are five, and only five, ways in which government can get money. Three are exclusive to government. The first way is by taxation. The second is by charging fees for official services, licenses, official papers, passports, etc.; which may or may not cover the cost of providing the services. The third is by going into business, the same sorts of business, more or less, that private employers are engaged in. The fourth is by borrowing it. The fifth is by making it—physically creating it.

The last has a peculiar allure for government heads, and has been frequently adopted in the past in various countries when official finances were at a low ebb. There are various methods, "debasement of the currency," which in our own recent history has been called by the blander name of "devaluing the dollar," or simply by starting the printing presses going. It has its champions. Indeed, the scheme for economic regeneration known as Social Credit, which enjoyed a great vogue a few years ago, stripped of all its verbiage and its tortuous meanderings around Robin Hood's barn, appears as nothing more than a clever scheme for a carefully controlled annual increase of the currency so that employers could get direct from the government the profits that they can not get in any other way. There is a certain elemental and naive logicity about it. But all such schemes are inflation, and in the modern temper of society no plan can hope to get very far that is based on open and continuous inflation, no matter how carefully it is supposed to be controlled. This expedient may therefore be

dismissed as a practical source of revenue.

Expedient number two may also be summarily disposed of. Many of these fee-charging agencies doubtless operate at a loss, and in any case it would not be possible to raise the charges sufficiently to provide the vast sums needed to pay for full employment. There remain, then, as possible sources of the money to pay the wages that private business can not afford to pay, taxation, borrowing, and government business.

The primary, and most conventional, way for government to get money in democracies is by taxation. So let us consider that first. It is not pertinent to the present inquiry to appraise the various methods of taxation. Let us suppose that they are efficient, rational, and well-established. The question that concerns us is how shall they be extended sufficiently to provide the enormous sums that will be needed, and when? It must be kept in mind that this money is to be paid out at times when business is at a low ebb. Shall it be collected currently as it is paid out, or shall it be accumulated in advance, during the periods of business prosperity? The question would seem to be almost self-answering. Certainly it would be disastrous for the government to try to get these sums from business at a time when it is already in desperate straits to keep its head above water, or from the consuming public which is already too short of funds to provide a profitable market for the producers. No, if government is to have this money available to pay supplementary wages when they are needed it must collect it while business is booming. All right then, from whom?

There are just two main categories, profits on the one hand, and the general income of the community, which provides the consumer gross market, on the other. Any increase in the taxation on profits would have the effect of discouraging business expansion, driving some of the weaker concerns to the wall, and so threatening full employment itself. The recognition of this principle is manifested, as these words are being written, by the enthusiasm with which Congress, in its efforts to speed up a profitable reconversion, is seeking to relax the burdens on business in

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On the other hand, if this increased taxation is laid upon consumers its effect would be to restrict the general market, make less money available to buy finished products, and so make it even more difficult for employers to realize their anticipated profits. At any rate, increases of taxation of this magnitude would be bitterly opposed by business in general, and would be attacked as an enroachment upon "free enterprise."

But, for the completion of the argument, let us suppose that it were possible for the government during periods of prosperity to withdraw from circulation the huge sums necessary for the anticipated depression. What is it to do with them? They certainly could not take the form of hoarded currency. There isn't anywhere nearly enough money in existence for that purpose. If all the money in the country were appropriated by the government and tucked away in Uncle Sam's stocking it would not be enough to provide a decent living for the unemployed of a single year in such a depression as the last. No, these accumulations would have to take the form of credits in banks and other financial institutions. As such, they would be used as the basis for increases in the general circulating medium, thus aggravating the inflationary tendencies of the period. And worse still, they would have to be paid back to the government at just the time that the financial structure could least afford it, and the results would be most disastrous. There is the further danger that, however collected and however stored, much of these funds would be expended for other purposes as, it is alleged, has happened to the Social Security reserves.

If we turn to the expedient of borrowing, we find the case no better. In fact, the principles are much the same as with taxation, with the additional complicating factor that loans are supposed to be paid back. But how, and when? If it is difficult or impossible for government to get money for such purposes by taxation, it is vastly more so to do it by borrowing. To conduct such a long-time policy on the basis of borrowing, or, as it is more euphoniously called, "deficit

financing," would be conceivable only in some financial combination of Erewhon and Alice's Wonderland. If it is either of these two, it must be taxation.

There remains the expedient of government enterprise, or, to put it perhaps a little more accurately, government projects. Every current plan for full employment that is worthy of attention makes a large place for these, and demands preparation for them. They can be of two sorts, which are customarily designated as "self-liquidating" and "non self-liquidating." A non self-liquidating project is one in which the government pays out the money, primarily in wages and with a minimum of expenditure for materials, etc., and never expects to get it back from the undertaking itself. A myriad such schemes have been proposed, and many of them put into operation: parks, playgrounds, swimming pools, bathing beaches, ski trails, reforestation, elimination of grade crossings, road improvement, etc., etc. The famous symbolic activity of leaf-raking was only an extreme development of the idea.

A self-liquidating project, on the other hand, is one where the government provides a good or a service and charges enough for it not only to cover the current expense of operation but to provide a margin out of which the original cost of establishment may be recovered. The Holland Tunnel and the George Washington Bridge in New York are outstanding examples. In brief, the government goes into business. Now the paradoxical thing is that the average American businessman, or the citizen in general, vastly prefers this type to the other. The reason is obvious enough—it appears to cost him less money. Yet judged from the point of view of business stability and the provision of full employment the balance is precisely the other way. A non self-liquidating project takes money from those who have it and pays it to those who have not, thus tending in the direction of equalizing consumer income and supporting the market for privately produced goods. But in a self-liquidating project the government goes into competition with private business. By charging for its output it diverts purchasing power from the general market,

thereby reducing the effective demand for the products of private business and making it that much more difficult or impossible for them to meet full pay-rolls. In addition to which, the government has the advantage of being able to get along with a much smaller margin of profit than the private employer thinks necessary. But obviously this is the only type of government project for which the money must not be secured by either taxation or borrowing.

So we come around full circle to the ineluctable dilemma, which can be concisely stated thus: Private business can not possibly provide continuous full employment. If we are to have full employment, the activities of free enterprise must be supplemented by government. But in order to accomplish this, government must have at its disposal as much money as would be paid out by private business if it were running at full blast. And this money must come, directly or indirectly, from private business; directly as a levy on profits or indirectly, from the income of the general community which, as purchasing power, supports private business. However and whenever accumulated, the withdrawal of this money by government constitutes a drag on business, thereby tending to aggravate the very evils that it is designed eventually to offset. There is therefore set up a self-activating process of which the eventual outcome could only be the practical monopolization of employment by government.

Likewise, reluctantly as may be, we come face to face with the question of profits. For, in the last analysis, the only source from which the government could practically get the money to underwrite full employment would be from profits. Even though the taxes were nominally laid on the general income of the community, the ultimate impact would be on business. For, as must never be forgotten, these huge sums are either hoarded—which would hardly be possible—or transformed into credits. In the latter case, during the boom period they would tend to flow into increased capital expansion (which is precisely what is not needed) rather than into consumer demand

which might help to provide profits upon the invested capital already in existence. And when the time came for the government to cash in on these credits, the money would come mostly from the wealthier elements of the community, and would be paid out to the poorer.

If it be true, as was asserted at the outset of this article, that monetary profits on a society-wide scale are an inherent impossibility, then we come up against an absolute impasse. Henry Wallace, in his carefully worked-out and admirably conceived plan for sixty million jobs, includes an annual item of \$18,000,000,000 profits. If this sum just isn't there, obviously his whole structure collapses, and so does any other structure that rests upon the assumption of a continuous flow of net profits.

Free enterprise and full employment are, in their very essence, as incompatible as oil and water. The only basis on which the two could get along nominally together would be that government should take away *all* profits and use them to supplement wages, in which case "enterprise" certainly would not consider itself free, and, indeed, there would be no enterprise for there would be no motive for it. The price-and-profit system has run its course, and outlived its usefulness as a result of its very characteristics.

The hard, relentless, irresistible forces of social evolution are carrying the world inescapably in the direction of collectivization. What form it will take in different countries depends on the whole culture and ethnic background of each particular country. Whether it comes peacefully and smoothly, or with violent upheavals and destruction of life and property, depends primarily on the clarity with which the leaders of public thought and action can read the handwriting on the wall.

In a country like the United States, with a vast margin of producing power over and above the requirement of even a high general standard of living, it will probably be possible to preserve the free enterprise system for some time—perhaps for several decades—if we are willing to pay the price. But we must

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not delude ourselves into thinking that it would not be a high one. In coming to a rational decision, as every responsible citizen

should do for himself, we must make a careful and deliberate comparison of the respective values involved.

TECHNOLOGICAL ACCELERATION AND THE ATOMIC BOMB

HORNELL HART

Duke University

WHAT light can statistical study of social trends throw upon the problem of the extent and character of the changes which may be expected from the introduction of the atomic bomb?

HOW MUCH HAS THE ATOMIC BOMB INCREASED DESTRUCTIVE POWER?

It is generally agreed that the atomic bomb has increased tremendously the power to destroy life and property. It will be shown below: (1) that the quantitative estimates of the amount of increase vary to such an extent that most of them must be dismissed as merely sensational guesses; (2) that the most trustworthy estimates are far below the average; but, (3) that even these conservative estimates indicate the overwhelmingly greatest and most sudden increase in destructive power ever experienced by mankind; and (4) that even this terrific increase is less significant than the fact that atomic developments are evidently part of an accelerating process which has been taking place for hundreds of thousands of years, and which has now reached ominous rapidity.

The explosive power in the atomic bomb, divided by that of an equal weight of TNT or of bombs¹ containing TNT, has been estimated at ratios varying from 2,000 to 30,000,000,000. Dismissing the 30 billion estimate as obviously due to a careless adding of 000 to other current guesses, the present writer has found 21 different published statements, scattered through the sources cited at the end of the present arti-

cle,² with estimates averaging 14,000,000 times as much explosive power in the atomic bomb as in TNT bombs. The distribution of the guesses is highly skewed: the median estimate is only 2,000,000. The standard deviation of the series is 43,000,000. Since journalistic discussions of the atomic bomb have contained such huge errors as these, careful thinkers must require a critical inquiry into what the facts actually are, and what are the probabilities for which social scientists should prepare.

The nearest which it seems possible for outsiders to come to a reliable estimate of the practical destructiveness of atomic bombs as compared with previous explosive projectiles is to compare actual casualties and actual demolitions. A conservative estimate of the number of persons killed instantly at Hiroshima and Nagasaki combined, is 90,000 (See sources 3, 36, 37, and 109 in the bibliography at the end of this article). The weight of the atomic bomb has been most frequently estimated at 400 pounds (11, 31, 113, etc.) or 800 pounds for the two bombs, which would work out at 225,000 deaths per ton. The highest comparable figure which the present writer has been able to find for killings per ton of TNT is 3.0 deaths per ton in the bombings of London in World War I.³ This would mean that the atomic bombs, in August, 1945, killed 75,000 times as many people per ton dropped as TNT bombs killed per ton in 1914 to 1918 in London.

¹ See sources numbered 7, 10, 11, 20, 21, 23, 25, 31, 41, 48, 65, 66, 72, 77, 88, 96, 103, 105, 106, and 108.

² 8,776 bombs were dropped on London from 1914 to 1918 inclusive, killing 1,316 persons (9, Vol. I, pp. 459b, 461). Douhet (24) estimates the average weight of 1,500 bombs dropped on Treviso from

³ There is much confusion between weights of bombs and weights of explosives in journalistic accounts, but this is only one of many sources of variation in estimates.

Instead of persons killed, the areas devastated by atomic, versus TNT and fire, bombs might be taken. The area "wiped out" in Hiroshima was 4.1 square miles, while that destroyed in Nagasaki was 1.0, or a total of 5.1 square miles devastated by an estimated 800 pounds of atomic bombs, making 12.73 square miles per ton. In Nagoya on April 14, 1945, 3.1 square miles were devastated by 3,500 tons of TNT and fire bombs, while in Osaka, on June 1, 3.4 square miles were devastated by 3,200 tons; a total of 6.5 square miles by 6,700 tons of the older types of bombs, or .00097 per ton (65, 88). This comparison would make the atomic bomb 13,100 times as devastating as the older types. This comparison has the advantage of being based on reports by our own military observers instead of the Japanese. It has the disadvantage that no comparable data (as far as the present investigator can discover) are available for World War I.

The figures for killing and for devastation may well be consistent with each other in view of the fact that destruction of an area by fire is much slower than by atomic bomb, and that a much larger proportion of the persons in the district destroyed by fire would therefore be able to escape. We are vastly more conservative than most commentators, and far more realistic, when we estimate that, in terms of power to destroy human life in cities, the atomic bomb of August, 1945, was at least 75,000 times as effective, per unit of bomb weight, as were TNT bombs of 1916.

The destructive power of explosives had

1916 to 1918 at 50 kilograms each, adding, "Very likely it was less." The best estimates which the writer has been able to locate for killings per ton in other cases are as follows:

Dates	Locations and Types	Killings per ton	Source Numbers
Nov. 14, 1940	Coventry, TNT & incendiary	.38	63
To July 6, 1944	London, V-1 bombs	.50	14
Sept. 8, 1944 to Mar. 27, 1945	London, V-2 bombs	2.18	68
to Aug., 1945	Japan, TNT & incendiary	2.18	37

been increasing gradually ever since gunpowder was introduced, about 1346. TNT, first used for military purposes in 1902, is barely twice as strong as black powder was, six centuries earlier. Up to August, 1945, explosives 3.2 times as powerful as black powder had been developed (106). The atomic bomb was thus approximately 150,000 times as destructive of human life as was black powder. To represent such acceleration graphically it is necessary to use an eight-cycle logarithmic scale as in Figure 1.

Two different types of forecast might be based on such a chart. First, it might be assumed that the atomic bomb has suddenly moved us up from the relatively slow development of 1902 to 1945, onto a new plateau, indicated by the horizontal line at the 150,000 level. Or, second, it might be anticipated that the discovery of the atomic bomb is merely the opening surge of a steeply sloping acceleration which may be indicated hypothetically by the curved line. The formula for the curve is:

$$\log Y_e = 10^{9.4786 + .02267 (d_a - 1902)} \quad (1)$$

where Y_e is the killing power (as calculated from the curve) of the most destructive explosive available, divided by that of gunpowder, and d_a is any assigned date the period for which the curve represents the real trend. This type of curve will be referred to as the loglog type of accelerating trend.

In considering the above alternative interpretations of Figure 1, it may be of interest to note that various commentators have predicted further increases in the destructiveness of atomic bombs—such as that "a single heavy attack, lasting a matter of minutes, might destroy the ability of the nation to defend itself further" (87); that 40,000,000 Americans could be killed in one raid (80); that atomic bombs would kill perhaps two-thirds of the people of the earth (26); that bombs 100 times as powerful as those dropped on Hiroshima and Nagasaki are already available; that scientists are now able to produce bombs of which three, if properly placed, would wipe out not only our

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cities, but every man, woman, and child in the United States (47, 76); that major further increases in atomic explosive power are to be expected in the near future (1, 5, 21, 79, 80, 113); and the like (2, 4, 15, 16, 22, 39, 42, 50, 52, 56, 69, 71, 81, 93, 95, 99, and 107). As the *New Republic* put it, "The

simplified graphic form the essential available facts and two alternative interpretations of those facts. The upward-sweeping curve in that figure, however, acquires intensified significance when it is realized that it conforms to a general sociological principle, recognition of which has been emerging for

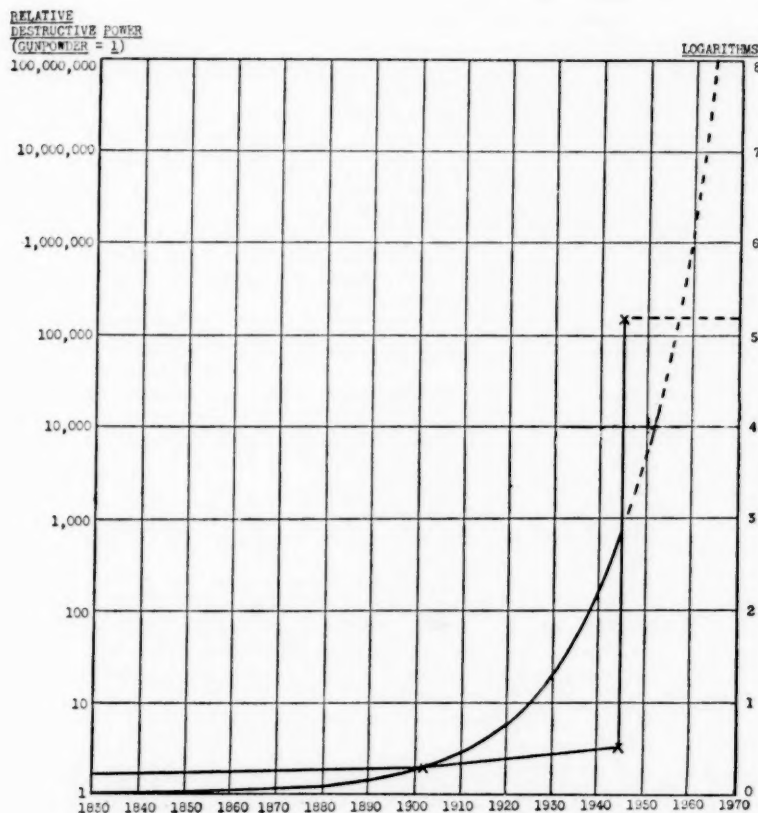


FIGURE 1.

Relative destructive power of most effective explosives, 1830 to 1945, with loglog trend fitted, 1830 to 1965

present bombs are toys compared to what lies ahead" (62).

CULTURAL ACCELERATION AS A GENERAL PRINCIPLE

The observations on which formula (1) is based are too few to establish a statistically reliable trend; hence Figure 1 must be regarded as a heuristic device presenting in

over 40 years past, and which has been more and more clearly formulated during the past two decades. Some of the pioneering theorizing and research related to this principle are summarized in Table 1.

Articles dealing with logistic social trends have become so numerous that it would require undue space, in Table 1, to list more than a few outstanding contributions. A ful-

TABLE 1. EMERGENCE OF THE CULTURAL-ACCELERATION THEORY: A TABULAR SUMMARY OF SOME OUTSTANDING CONTRIBUTIONS

Date	Author	Phrases used to state the fact of cultural acceleration	Mathematical trends suggested		Statistical data cited
			Exponential	S-shaped	
1844	Verhulst			Logistic	Population
1877	Morgan	"Human progress . . . has been . . . slowest . . . in the first period and most rapid in the last."	"Essentially geometrical"		
1905	Balfour	"We differ more from our grandfathers . . . than they did from the Babylonians."			
1912	Robinson	"Man's progress was . . . well-nigh imperceptible for tens of thousands of years, . . . but it tends to increase in rapidity with an ever accelerating tempo."			
1916	Lehfeldt	"There is a period of acceleration (in material progress): then one of steady change: then a . . . new stationary condition of society"		Cumulative normal frequency	Trade, births, population
1917	Lowie	"We may liken the progress of mankind to that of a man 100 years old, who dawdles through kindergarten for 85 years, takes 10 years to go through primary grades, then rushes with lightening rapidity through grammar school, high school and college."			
1922	Ogburn	"The growth of culture . . . was slow in very early times. . . . From neolithic times . . . on, the changes have been much more rapid. At the present time change . . . may be measured in such brief intervals as generations or even decades."	Comparable to but not described by the compound interest curve.	Cumulative normal frequency, citing Lehfeldt	Patents
1924	Pearl	The population of the world has trebled during the past 200 years.		Logistic	Populations
1925	Chapin	"Cultural change is accumulative, . . . also wave-like."			Governmental functions, city-manager cities
1927 to 1930	Kuznets	Industrial outputs in various Euro-American countries have shot upward logarithmically since 1800.		Logistic and Gompertz	60 series of industrial output
1928	Chapin	"Culture elaborates, accumulates, piles up, at what appears to be an ever-accelerating rate. . . . Particularly since the advent of writing and the use of iron, has cultural growth shot up."	Parabolic	Logistic and Gompertz	Governmental functions, city-manager cities, plows

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TABLE I. (Continued)

Date	Author	Phrases used to state the fact of cultural acceleration	Mathematical trends suggested		Statistical data cited
			Exponential	S-shaped	
1929	Fairchild and Hart	"Except for temporary fluctuations, man's power to cut and shape materials has increased during the past million years at accelerating speed."			Cutting tools
1930	Wallis	"Acceleration . . . is primary."			
1931	Hart	"Man's power to control his physical environment has been increasing with accelerating speed, with only temporary and local set-backs and stagnations."			Speeds, ranges, bridges, wages, government areas, etc.
1937 1940	Sutherland and Woodward	"Technological culture grows increasingly complex all the time. Furthermore the rate of increase accelerates."	"Likened to the compound interest curve"		Tools, weapons, speeds, structures
1940	Ogburn and Nimkoff	"THE ACCELERATED GROWTH OF CULTURE"	Exponential	Logistic	Inventions, speeds, tools
1945	Stern	"Unlocking of atomic energy . . . dwarfed the technological changes prior to it. . . (Before that) advances in technology during the war had been far greater than during many preceding decades."			
1945	Palmer	"The progress of airpower may be greater in the next five years than in the past forty-two."			

Source: See the respective names and dates in the bibliography at the end of this article.

ler bibliography on the logistic aspects will be found in reference (34). From the references cited in Table I, supplemented by this additional bibliography, the outlines of a hypothetical law of cultural acceleration begin to take shape. In general terms, this hypothesis may be stated as follows: *Throughout the entire sweep of history and prehistory, the power of human beings to achieve their basic purposes has been increasing at accelerating speed, with local and temporary stagnations and setbacks. This long-run acceleration has taken place through series of logistic and Gompertz surges, having higher and higher rates of increase.*

In order to make this hypothesis more precise, the following more detailed specifications of its component terms are offered. The term "local and temporary stagnations and setbacks" must be interpreted broadly enough to include the cultural stagnations of India and China, lasting hundreds of years, and also to include such setbacks as the political and technological relapses which occurred in Europe's Dark Ages, the disintegrations which occurred between imperial expansions in Egypt, Mesopotamia and other areas, and the like. From the standpoint of the persons involved, these stagnations and setbacks must have seemed anything but local and temporary; but in the perspective

of the past million years, our theory regards them as incidental. There remains the sub-hypothesis, however, that some such "set-back" might, in the future, be so acute and so widespread as to terminate the entire process.

By *basic purposes* are meant the more universal needs and desires of mankind, including: (1) to cut and shape materials; (2) to build larger and more powerful structures; (3) to produce more real income; (4) to reduce sickness and death rates; (5) to travel more rapidly; (6) to thwart and destroy national foes; (7) to communicate more rapidly and completely; (8) to acquire increased knowledge; (9) to expand education; and (10) to enlarge areas and populations governed from a centralized capital. The other terms in the hypothesis will become clearer as the evidence is presented.

The hypothesis, as stated, is descriptive rather than explanatory. Suggestions as to some of the causal factors involved have been offered by Morgan (58), Ogburn (73 to 75), Chapin (12, 13), Hart (32) and others. In the light of these suggestions, and also of the growing mass of data which has been analyzed in recent years, the following theory may be formulated as to the causation of cultural acceleration: Every invention consists in a new combination of previously existing elements. These elements include previously achieved inventions, the biological potentialities of the human organism and of other fauna and flora, and the physical and chemical potentialities of the non-living environment. Man's needs and desires (including his curiosities) keep pressing him to explore new combinations of the elements which, at the time, are available to him. As the number of past inventions increases, the number of possible combinations between the elements increases acceleratingly (approximately as the number of possible combinations and permutations, but modified by the varying degrees of potentiality in the various past inventions, and by the obsolescence of part of the past elements). The amounts of improvement which might be achieved, in any measurable index of a

human desire or need, by various possible combinations of elements, may be assumed to fall into some type of statistical frequency curve—normal or skewed. The likelihood of achieving a large improvement (say five standard deviations above the average of the possible combinations) increases as a function of the number of combinations available, since the greater the departure from normal, the more rarely it occurs. But the standard deviation of potential improvements itself increases as more and more powerful elements (such as steel, lenses, logarithms, calculus, the experimental method, steam engines, electric motors, gasoline engines, photoelectric tubes, and so on without limit) become available. Consequently, as long as cultural evolution goes on it may be expected to accelerate, subject to limitations inherent in an unchanging physical and chemical basis and in a relatively unchanging set of *human* biological elements. So much for a theory as to why cultural change in general tends to accelerate.

As to why the general curve is composed of logistic surges, the following theory seems promising: When a new, highly potential element becomes available (such as the steam engine, or the newly discovered Western Hemisphere) a certain number of potential combinations with this new element become possible. Each combination which proves effective becomes a diffusion center from which other combinations are propagated or stimulated. If the proportion of these possibilities which has been achieved is represented by p , and the proportion yet to be achieved is represented by q , the number of pregnant contacts at any given time is proportional to pq , and the cumulative number of combinations effected is proportional to the integral of pq . Several writers have shown that this integral is equivalent to the logistic curve (84; 29, 44, 89, 114).

The process of testing the validity of the cultural-acceleration hypothesis involves examining the most comprehensive, reliable and pertinent data, and observing whether they conform to the predicted types of curves. The most comprehensive series of trust-

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worthy data extending back through paleolithic times consists of cutting tools. The accelerating increase in man's power to cut and shape his material environment seems unquestionable (28, 75, 104, 112), but it has not yet been proven mathematically. We turn, therefore, to another aspect of technological increase in man's power to attain his purposes—namely, his speed of travel.

ACCELERATING INCREASES IN WORLD SPEED RECORDS

The clearest mathematical evidence of technological acceleration, over thousands of years, is in maximum speeds of human travel. Until horses were domesticated in the late Neolithic or early Bronze Age, about 15,000 B.C., man's fastest speed of travel was on foot, at a maximum of about 10 miles per hour. From the domestication of the horse to the development of the locomotive, about 1825, man's fastest speed record was not more than 35 miles per hour. A horse named "Flying Childers" is reported to have run a mile at the rate of 34.8 m.p.h. about 1800 (see 111).

From 1800 onward the outstanding speed records of the world are summarized in Table 2 and in Figure 2. Continuous and reliable records for horses are not available previous to 1875. The horse data presented are averages of the records for the Kentucky Derby (yearly records from 1875 to 1944) and for the Preakness Stakes at Pimlico (yearly records from 1873 to 1944), interpolated at five-year intervals. These averages follow closely a logistic trend, as shown in Figure 2A. The curvilinear correlation, corrected for degrees of freedom, is $\bar{r} = .998$. This logistic trend for 1875 to 1944 does not prove that horse speeds before 1875 conformed to such trends, but the findings are consistent with our general hypothesis.

All horse speed records were broken by the locomotive in 1829. Locomotive records approximated a logistic curve ($\bar{r} = .964$), as shown in Figure 2B. In 1906 the automobile took the lead. Before streamlining was invented automobile records conformed to the logistic curve ($\bar{r} = .996$) shown in

Figure 2C. Records for streamlined automobiles broke through the ceiling of the old curve in 1927, but in the meantime airplanes had taken the lead in 1920. Air records followed the logistic ($\bar{r} = .994$) shown in Figure 2D. The jet plane has now broken through the old airplane speed ceiling. Thus, the four major types of speed records of the past 150 years have all conformed to logistic trend curves. The constants for the formulas are given in Table 3.

When universal world speed records are taken, regardless of type (as indicated by the italicized figures in Table 2) it is found that the general trend is not logistic, but of the same general accelerating loglog form as the curve fitted to the destructive power of explosives, in Figure 1. The speed records conform to this curve with a corrected curvilinear correlation of .984. The records and the fitted curve are shown in Figure 2E. The constants of the formula for this curve are given in line 2E of Table 4.

Before accepting the trends of speed records as even a partial and tentative confirmation of the general acceleration theory, several questions must be answered. First, are the four apparent logistic trends, and the general loglog trend, the results of mere random fluctuation, or chance? A *chance trend* may be defined as one which would disappear if the sample were enlarged beyond any assignable limit under essentially the same defined conditions as those under which the given sample was collected. An operational test generally accepted among statisticians for discriminating between chance and real trends is to enquire, by means of the t-test or of the Z-transformation, how frequently a correlation of the given amount would occur in samples of the given size, fitted with a formula of the number of constants actually used, if such samples were actually drawn from a universe in which the correlation was zero (17). If the correlation in a given sample would occur by chance less than once in 100 such samples, the correlation is usually accepted as reliable. Among the four logistic curves of Figure 2, the one most likely to occur by

chance is that fitted to locomotive speeds. This close a fit would turn up through random fluctuation less than once in 300 such samples, according to the t-test, and much less frequently than that, according to the Z-transformation. None of the other correla-

whether, in spite of whatever random roughness may characterize the data, the observed trend is due to other than chance factors. A real danger which might be introduced by roughness of data is that the lack of objective precision might open the way to

TABLE 2. WORLD SPEED RECORDS, IN MILES PER HOUR

Year	Race horse	Locomotive	Automobile	Year	Race horse	Locomotive	Automobile	Airplane	Year	Race horse	Automobile	Airplane	Jet plane
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1800?	34.8?	...	...	1901	...	120	54	...	1923	...	...	267	...
1813	...	5	...	1902	...	...	...	23	1924	...	...	278	...
1825	...	15	...	1903	...	130†	90	...	1925	36.7	...	...	...
1829	...	44	...	1904	...	...	...	40	1927	...	204	290	...
1848	...	68	...	1905	35.7	127†	110	...	1928	...	207	319	...
1875	33.7	...	...	1906	...	...	128	...	1929	...	231	358	...
1880	34.0	...	...	1908	...	...	...	48	1930	36.8	...	...	...
1885	34.2	...	...	1909	...	...	...	50	1931	...	246	415	...
1890	34.7	...	...	1910	36.1	...	141	68	1932	...	254	...	...
1893	...	112	...	1911	...	...	142	83	1933	...	272	424	...
1894	...	...	13	1912	...	...	...	107	1934	...	...	441	...
1895	35.0	...	15	1913	...	...	...	127	1935	36.9	277	...	...
1896	...	...	16	1915	36.5	...	...	...	1937	...	311	...	...
1897	...	...	25	1919	...	...	156	...	1938	...	357	...	...
1898	...	...	27	1920	36.6	...	...	194	1939	...	369	469	...
1899	...	...	42	1921	...	...	...	205	1940	36.9	...	...	...
1900	35.4	...	...	1922	...	...	...	248	1945	37.0	...	...	640

† The record of 130 m.p.h. in 1903 was made by an electric locomotive; the record of 127 m.p.h. in 1905 was made by a steam locomotive, as were all the other records in columns (3) and (7).

Sources: columns 2, 6, and 11: 111 and 115, p. 809, 811; columns 3 and 7: 30, 32, 40, 55; columns 4, 8, and 12: 30, 51, and 92; column 14: 79.

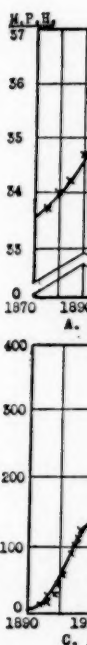
tions cited for the speed curves would emerge by chance as often as once in a million times.

But a question has been raised "about the validity of applying mathematical-statistical devices of description and interpretation (in view of) the scanty and rough characteristics of (these) data." Whether the data are too scanty to justify fitting such curves is exactly the question which the t-test and the Z-transformation were developed to answer. If the data are "rough," that means that inaccuracies have entered into their measurement or recording. But in so far as such inaccuracies occur at random, they tend in the long run to reduce, not to increase the correlations, and the tests used are trustworthy instruments for determining

conscious or unconscious manipulation for the sake of making the data fit the prejudices of an investigator. This danger seems in the present cases to be slight, because of the small degree of roughness as compared with the relatively huge increases in the indexes. The burden of proof is on the critic if he believes that bias has distorted the facts.

But suppose that it be admitted that the four logistic trends of Figure 2 are not mere chance fluctuations, and are not due to biased selection. A further objection is then raised to accepting the general accelerating curve (Figure 2E) on the ground that "it merely summarizes a trend which appears when diverse population elements are thrown together." To make the objection clearer, let us suppose that one were to select horse

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speed records for the years 1900 to 1915, were then to select automobile speed records from 1919 to 1938, and finally to select airplane and jet plane records for 1939 and 1945. Such selections would produce an even steeper acceleration than that actually shown in Figure 2E. One can, of course, prove almost anything by arbitrary selection

vice achieved the fastest official speed record.

The speed data do thus conform to, and to that extent do confirm, the hypothesis of cultural acceleration, both as to the general trend and as to the component logistic surges. It would of course be appropriate, for any critic who can do so, to point out any evidence that seems to him to indicate that the

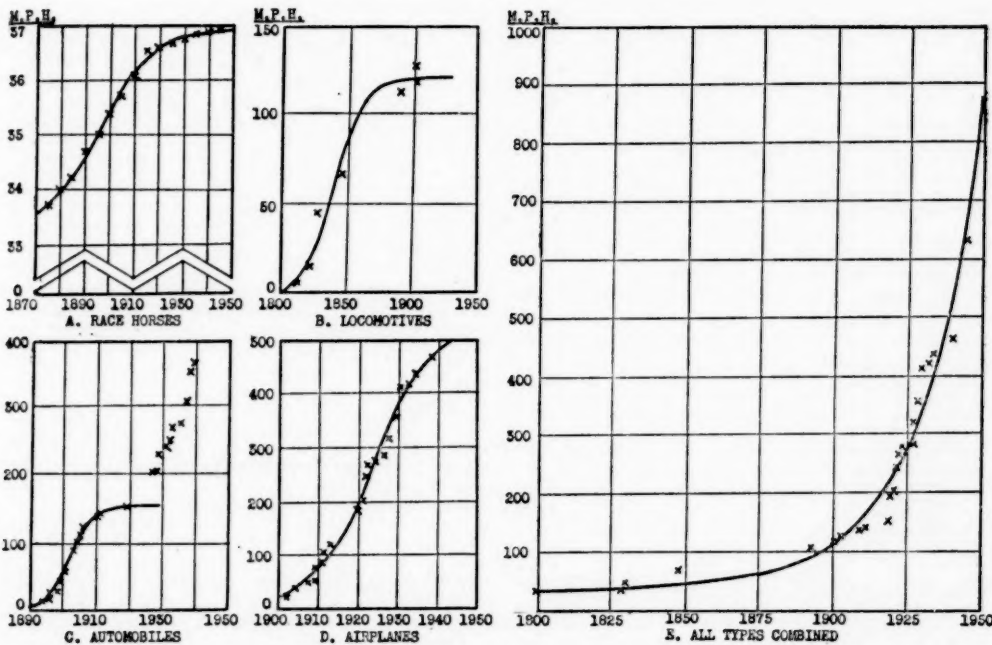


FIGURE 2.

World speed records, with logistic trends fitted to four separate types, and loglog trend fitted to combined records

of data. But no such arbitrary selection has entered into this study. Our hypothesis suggests that the persistent pressure of the human desire to travel more rapidly has kept mankind experimenting with various combinations of previous inventions, and has led to cultural selection of those, from among the potential and actual inventions, which best satisfied basic desires. The hypothesis thus calls for frequent shifts in the means used to accomplish the persistent purpose. The apparently heterogeneous devices employed are selected for inclusion in the series on the wholly objective basis of which de-

author may have selected data arbitrarily to conform to his hypothesis. The author believes that he has successfully guarded against this source of error. Any critic who believes that he can suggest any alternative trend curves which might fit the data more closely is invited to do so. The author has not been able to find any such superior fit. Until alternative hypotheses of these or other kinds are supported by adequate proofs, the author believes that the foregoing analysis of speed records constitutes (in that area of technological change) a *prima facie* confirmation of the hypothesis.

ACCELERATING TRENDS IN PROJECTILE RANGES

One of the alternative interpretations of Figure 1 is that the destructive power of explosives is increasing along a loglog trend,

the air. According to the best information which the present writer has been able to discover, the records conforming to the foregoing definition have been as listed in Table 5. When the 12 items which have equalled

TABLE 3. CHARACTERISTICS OF THE LOGISTIC TRENDS OF FOUR TYPES OF SPEED RECORDS (M.P.H.)*

Line Number	Description of Series	Number of Items	Dates of Data		Date of Inflection (d _i)	Growth Zone		Growth log-arithmetic (g)	Curvilinear Correlation ($\bar{\rho}$)†	Critical Ratios**	Gain per Year at d _i ††
			From	To		Lower Limit (k ₁)	Width (k ₂)				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2A	Mean interpolated records of Kentucky Derby and Preakness Stakes (Pimlico)	15	1875	1945	1896	33.27	3.69	.0415	.998	10.93	.09
2B	Steam locomotives	7	1813	1903	1842	0	120	.0427	.964	3.33	2.72
2C	Automobiles (non-streamlined)	13	1894	1911	1902.4	0	157	.1366	.996	8.60	12.36
2D	Airplanes (not jet-propelled)	21	1902	1939	1923.3	0	535	.0591	.994	11.98	18.24
2X	Horse, locomotive, and automobile records	10	1800	1919	1913	25	242	.0128	.993	3.82	...

* The individual formulas for the five logistic trends described in this table may be obtained by substituting the constants of the respective lines in formula (2):

$$Y_e = k_1 + \frac{k_2}{1 + 10^{\frac{d_1 - d_2}{d_3}}}$$
(2)

where d₁ is any assigned date during the period for which the formula is valid.

† Each of these coefficients of curvilinear correlation has been discounted for degrees of freedom (number of items minus number of constants in the predicting formula, which is four) by the method presented in (17), p. 679.

** The critical ratio used here is Z divided by σ_z . (See 17.) In textual discussions the t-test is also cited (17).

†† These are the differentials at the respective points of inflection.

that this increase is one aspect of an accelerating increase in military destructiveness in general, and that this accelerating military destructiveness is one aspect of technological acceleration in general. For the sake of a more adequate testing of this theory it is fortunate that a distinctively military series of trustworthy technological data is available; namely, the ranges of projectiles.

This series consists of the degrees to which man's successive inventions have satisfied his persistent desire to increase the distance at which he can destroy his enemies. As used in the present study, the phrase *record-breaking ranges of projectiles* will be taken to mean, for any given date, the longest non-stop distance, from base to target, over which a missile intended to destroy life or demolish structures has been hurled through

or broken all previous records for *chemically* propelled projectiles (including bombing planes) are plotted on a four-cycle arithlog grid, as in Figure 3D, it is found that the indicated loglog trend line fits the data of the past five centuries with a coefficient or curvilinear correlation of .969 (corrected for degrees of freedom). The formula for this curve is represented by line 3D in Table 4. According to the t-test, a trend so regular as this would arise by chance about once in a million times. The ranges predicted by this trend line would approximate 5,300 miles in 1950 and 13,800 miles in 1955.

The series shown in Table 5 includes record-breaking ranges of mechanically propelled missiles, of artillery, and of bombing planes. As in the case of speed records, each of these various techniques has been culturally selected because of its value in satisfying

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Line Number	Description
(1)	
1	Killing
2E	World
2X	Data
3A	Me
3B	Art
3C	Bo
3D	All

* The formula equation:

where Y_e is the logarithm of a at d₁.

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one persistent human desire; namely, to destroy or to threaten enemies at a distance. The wide margin of statistical reliability for the loglog trend of chemically propelled projectile ranges thus reinforces the verification

to 3C. Each of the three conforms to the loglog type of curve. The constants for their formulas are given in Table 4.

The curve fitted to the trend of mechanically-propelled missile ranges (Figure 3A)

TABLE 4. CHARACTERISTICS OF THE CONTINUOUSLY ACCELERATING GOMPERTZ ("LOGLOG") TRENDS DISCUSSED IN THIS ARTICLE*

Line Number	Description of Series	Dates of Data		Number of Observations	Log k	Dates of Selected Points		Loglogs		Loglog Y_2 - loglog Y_1 ÷ ($d_2 - d_1$)	Curvilinear Correlation (ρ)**	Critical Ratios***
		From	To			d_1	d_2	Y_1	Y_2			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Killing power of explosives, divided by that of gunpowder	1346	1945	4	.0000	1902	1945	$\bar{9}.4786$	.4534	.02267	†	†
2E	World-record-breaking speeds of travel	1800	1945	23	1.3397	1925	1942	.0374	.1523	.00676	.984	10.02
2X	Data most like to overpredict curve 2E	1800	1931	19	1.5400	1903	1927	$\bar{9}.7263$	$\bar{9}.9852$	.01079	.980	8.89
	World-record-breaking ranges:											
3A	Mechanically propelled missiles	-1,000,000	1500	4	$\bar{7}.6990$	-25,000	500	$\bar{9}.9260$	.2500	.00001316	†	†
3B	Artillery	1453	1918	9	.0000	1880	1917	$\bar{9}.8445$	.1761	.00896	.878	5.56
3C	Bombing planes	1918	1946	6	2.4472	1940.5	1946	$\bar{9}.6739$	.0797	.07377	.979	3.56
3D	All chemically propelled projectiles combined	1453	1945	12	.0000	1850	1930	$\bar{9}.6397$	.3844	.00931	.969	6.20

* The formulas for this type of trend are all of a continuously accelerating Gompertz type, whose form is indicated by the following equation:

$$\log Y_e = \log k + \log \log Y_1 + \frac{\log \log Y_2 - \log \log Y_1}{d_2 - d_1} (d_2 - d_1) \quad (3)$$

where Y_e is the calculated height of the curve at any assigned data d_e , k is the lower limit of the curve, $\log \log Y_1$ is the logarithm of the logarithm of any assigned point on the curve at a date d_1 , and $\log \log Y_2$ is the logarithm of the logarithm of any other assigned point at d_2 .

** These coefficients represent correlations between $\log Y$ and $\log Y_e$. They have been discounted for size of sample and for degrees of freedom.

*** The critical ratio used here is z divided by σ_z . See bibliography (17).

† Where ρ is insignificant the trends have been fitted merely to illustrate the hypothesis, and to show that the available data conform to it, even where they do not prove it.

Sources, by line numbers: line 1, see footnote 3, and reference (106); lines 2E and 2X, see footnotes to Table 2; lines 3A to 3D, see footnotes to Table 5.

of the acceleration hypothesis already obtained from speed records. Man's power to kill at a distance, like his power to travel more and more rapidly, has been accelerating for thousands of years along a loglog trend.

But, for additional confirmation, as in the case of speeds, the projectile-range data have been separated into three component series, and each of these has been fitted with a separate trend line, as shown in figures 3A

must be regarded as entirely heuristic. Yet it is far from being mere guesswork. It simply summarizes the following conclusions of anthropological research: During the early part of lower Paleolithic times no hafted weapons were available, and killing, beyond arm's reach, depended upon hand-hurled rocks and clubs with ranges which may safely be assumed to have been less than the modern record for the shot-put, about .01

mile. Sometime between this stage and the development of the bow and arrow, stone-pointed spears and then spear throwers came into use, presumably with ranges comparable to those reported for aboriginal Tasmanian spearmen—between .02 and .04 mile. The bow and arrow came into use sometime between 75,000 and 10,000 B.C., and raised killing ranges to a distance of not over .2 mile. Between 500 B.C. and 1500 A.D.

TABLE 5. WORLD-RECORD-BREAKING RANGES OF PROJECTILES, 50,000 B.C. TO 1945 A.D.

Line No.	Date	Type	Approximate Maximum Range in Miles
1	From before 1,000,000 B.C. to at least 200,000 B.C., nothing better than rock missile, thrown club, or simple javelin		.00-.01
2	Period between javelin and arrow		.02-.04
3	Starting sometime between 75,000 B.C. and 10,000 B.C., bow and arrow		.02-.17
4	From about 500 B.C. to 1500 A.D., catapult and ballista		.20-.50
5	1453 Cannon		1.0
6	1670 Cannon		1.1
7	1807 Rocket		2.0
8	1830 Coast artillery		3.0
9	1859 Armstrong's breach-loading rifle-gun		5.0
10	1900 Coast artillery		6.3
11	1910 Coast artillery		10.2
12	1912 Coast artillery		11.4
13	1914 Zeppelin raid on London		300
14	1916 U. S. 16-inch gun		21
15	1918 German gun shelling Paris		76
16	1918 Bombing plane		280
17	1938 Average European bombing formation		750
18	1943 Bombing plane		1200
19	1944 Bombing plane		2050
20	1945 Bombing plane		2500
21	1946 Bombing plane (announced)		5000

Source: Item numbers from bibliography, by line numbers of this table: line 1: 32, p. 81; 45; 54; 60, p. 2; line 2: 32, p. 81; 60, p. 2; line 3: 8, p. 165; 9, Vol. 2, pp. 265-266; 32, p. 81; line 4: 9, Vol. 5, p. 23D; 19; 32, p. 81; 57; 61, Vol. 2, p. 207B; 32, p. 81; 57; lines 5-6: 100; line 7: 64; line 8: 18; line 9: 59; lines 10-12: 61, Vol. 5, p. 511C; line 13: 9, Vol. 1, pp. 459-461; line 14: 32, p. 81; line 15: 9, Vol. 3, p. 550D; line 16: 38; line 17: 27; line 18: 86; line 19: 69; line 20: 116; line 21: 94.

catapults and ballistas were in use, with ranges somewhere between .2 and .5 mile. These general facts (for which authorities are cited in footnotes to Table 5) are not disputed in any authoritative studies known to the present writer. If they are accepted, the fact of sharp acceleration, approximating the form of the loglog curve, seems indubitable. However, the precise curve shown in Figure 3A and in line 3A of Table 4, cannot be regarded as more than an approximation.

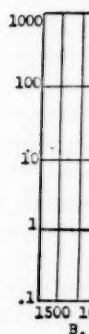
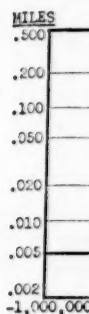
For artillery and bombing-plane records, enough data are available to test statistically the reliability of the fitted trends. For artillery records the corrected curvilinear correlation is .878; a curve as regular as this would arise by chance, with this number of observations, about once in 700 times. For bombing planes the corrected coefficient is .979, which would arise by chance about once in 600 times. Both of these component trends, as well as the trend of chemically propelled projectiles in general, are therefore, statistically significant.

We are thus led to the conclusion that the accelerating increase in the logarithms of the record-breaking ranges of projectiles is not a mere matter of chance, but is the characteristic trend of development in this type of technology, that this trend has been consistently evident as far back as records can be traced, that it is similar in character to the long-run trend which has been demonstrated in speed records and that future continually accelerating increases are to be expected unless civilization itself is destroyed, or unless its characteristics are fundamentally altered. These statistical conclusions are in harmony with the opinions of a number of journalistic commentators, who have predicted the development, within a few years, of projectiles with ranges reaching from any point on earth to any other point on earth (5, 43, 69, 91, 113).

OTHER ACCELERATING INCREASES IN DESTRUCTIVE POWER

The accelerating increase in killing power per ton of explosives, and the accelerating increases in ranges of deadly projectiles are

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not the only respects in which the destructive capacity of man has been conforming to the accelerating trend characteristic of technological change. The quantity of explosives which can be dropped on a given target in a given space of time has also increased acceleratingly. Data on this subject do not go back as far as data about ranges, but there is clear evidence that the tonnage of

Both of these series conform fairly closely to logistic curves.

The accelerating increase in bomb tonnages during the European phase of World War II gains in significance when comparisons are made with World War I. Total tonnages dropped in that war are not available, but the largest single bombing raid in World War I can hardly have involved

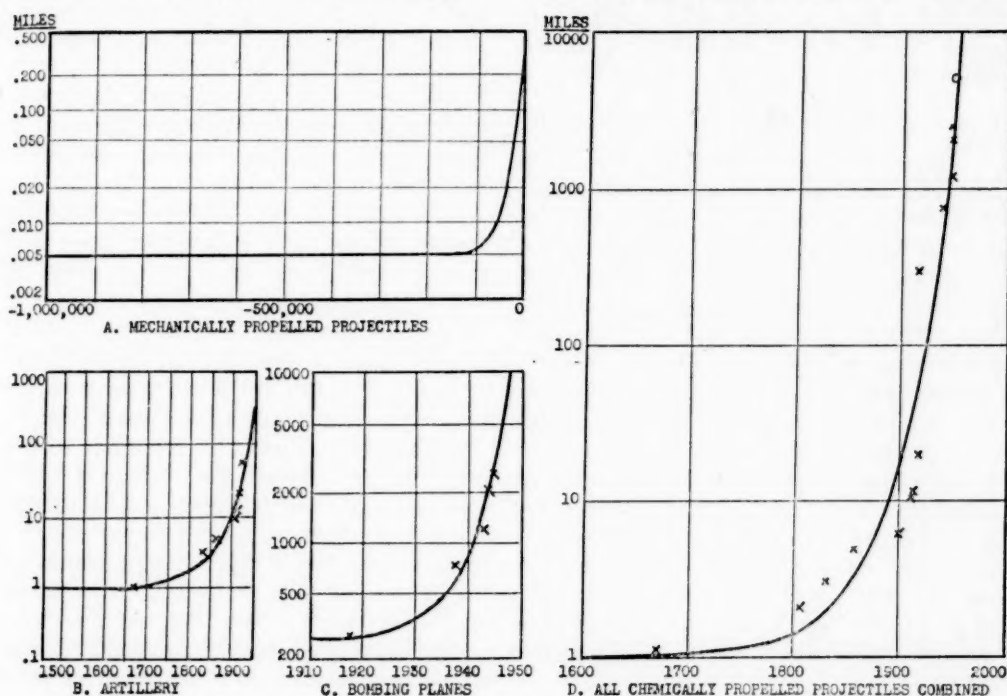


FIGURE 3.

World-record-breaking ranges of projectiles

bombs dropped has increased acceleratingly. The data for Western Europe during World War II are reported (102) as follows:

Year	Tonnage ^a dropped by	
	RAF	USAAF
1940	14,550	....
1941	35,800	....
1942	50,400	1,680
1943	175,900	53,100
1944	613,000	647,000
1945 ^b	641,000	882,000

^a Figures have been changed from long tons to U.S. tons.

^b Tonnages dropped during the first four months of 1945 have been divided by four and multiplied by 12 to get yearly rates.

more than 10 tons of bombs dropped. Subsequent record-breaking weights of bombs in single raids have been as follows:

Month	Tonnage Maximum of Bombs in a Single Raid ^a
June, 1918	10
November, 1940	450
May, 1942	3,000
March, 1944	3,360
October, 1944	5,040
March, 1945	5,600
August, 1945	6,000

Accuracy of aim has not been measured in any single index, but the development of

^a Bibliography, 33, p. 8; 67; 69.

radar (especially the radar fuse), of the Norden bombsight, and of other automatic calculating and pointing devices, indicates that here also accelerating progress has been taking place. However, the accelerating increases in explosive power, and in tonnages dropped, make accuracy of aim less important as a factor in future bombardments. Fleets (it has been stated)⁷ can be sunk without making a direct hit on any ship; cities can be obliterated without worrying about deflections of a mile or so in aim.

HOW GENERAL IS CULTURAL ACCELERATION?

Thus far in the present paper evidence has been presented showing that the hypothesis of cultural acceleration is consistent with data on human speed records going back for thousands of years, and also with data on projectile ranges going back even farther into prehistory. The writers cited in Table 1 have suggested that man's power to carry out his purposes in general have been increasing with accelerating speed (though with minor fluctuations) throughout the broad sweep of history and prehistory. The hypothesis formulated in the present paper applies to all forms of cultural achievement in which results can be measured in comparison with basic human objectives. To what extent can this wider hypothesis be subjected to testing in the light of objective data?

Accurate statistical data, on any social variable, go back only a century or two at most. For earlier dates estimates must be deduced from auxiliary evidences. But there are available a number of statistical series which prove that in various respects the English-speaking peoples and those of northwestern Europe have advanced as much, or more, in the past century as their ancestors did in all preceding time. This has been true of real income (34), of expectation of life (34), of various indexes of economic production and of technological mastery (34, 35), of the per capita graduation rates from high school and college (35), and of the

areas of record-breaking empires and commonwealths (33). The sources referred to, and the sources from which *they* were drawn, prove that the long-run trends in all these series must have been steeply accelerating, since such large fractions of all the progress ever made has occurred during the past century or so, and since no evidence has been found of any previous achievements higher than the beginnings of these modern surges. These sources also prove that the recent surges have conformed to logistic, or Gompertz, trends. A number of cases have been presented (especially in reference 35) in which long-run logistic or Gompertz trends have been found to have been composed of two or more shorter logistic or Gompertz surges. In summary, enough data have now been assembled and analyzed to verify the acceleration hypothesis, not only in a number of technological series, but also in the fields of public health, education, and government.

The fact of cultural acceleration is important for any theory of social change. But for operational purposes it is important to discover how reliable are the predictions which can be made of future accelerations. Limitations on space do not permit the presentation here of the evidence which has been analyzed on this point, but the general conclusions may be stated as follows. The history of technological acceleration in projectile ranges, travel speeds and power of explosives point strongly to the conclusion that earlier application of statistical methods would generally have underestimated radically rather than overestimated the accelerations which have subsequently occurred. On the other hand, the fact of technological acceleration has been becoming more and more unmistakable in recent years, and predictions seem to be approximating more and more closely to actual subsequent developments.

CONCLUSIONS

The challenging fact about the new atomic age is not merely that aggressor nations can now demolish their victims hundreds of thousands of times more devastatingly than in past wars; nor merely that this can be done

⁷ E.G., see 43, 78, 82, 107.

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practically instantaneously instead of giving the victim's allies years to prepare counter attacks; nor merely that relatively weak nations, if they attack suddenly, can now destroy over night the power of the greatest nations to resist conquest. The *supremely* challenging fact is that the apparently sudden increase in the potential power of aggressors is only a spectacularly dramatic expansion of technological developments which have been slowly accelerating for hundreds of thousands of years, and which now have a speed of increase which threatens to disorganize civilization. Baffling as are the problems of these opening years in the Atomic Age, the fact of technological acceleration means that the problems of the future will keep on compounding and expanding until they wreck our world, or until organized intelligence applies science effectively to mastering the social problems which technological acceleration creates.

What we are confronting is an extremely acute exacerbation of cultural lag. In a forthcoming article the writer will present evidence that, while education and political organization have also been accelerating in their development, the increase in power of destruction has immensely outdistanced the power of co-operative organization. Whenever science is systematically applied to promoting a given area of human purpose, man's achievements in that area leap forward spectacularly. Conceivably, social science might be applied to the problems of directing international co-operation toward the protection of mankind from destruction by physical science applied to military technology. If social scientists cannot begin now to grapple effectively with that problem, their span of activity on this earth seems likely to be severely limited in the near future.

BIBLIOGRAPHY

1. Arnold, Gen. Henry H., *New York Telegram*, Aug. 17, 1945; *Durham Morning Herald*, Aug. 18, 1945.
2. ————quoted, "The 36-Hour War: Arnold Report Hints at the Catastrophe of the Next Great Conflict," *Life*, Vol. 19 (Nov. 19, 1945), pp. 27-35.
3. AP dispatch (unsigned) dated Tokyo, Sept. 8, 1945, *New York Herald Tribune*, Sept. 9, 1945.
4. Attlee, Clement R., "Attlee Warns Group That A-Bomb May Be Succeeded by Others," UP dispatch, London, *Durham Sun*, before Nov. 30, 1945.
5. Baldwin, Hanson W., "Atom Bomb Calls for Re-Study of All Our Plans for Defense," *Reader's Digest*, Oct., 1945, pp. 9-10.
6. Balfour, Arthur J., *Essays and Addresses*, 3rd Edition, Edinburgh, 1905, pp. 326-329.
7. Bernal, J. D., "Everybody's Atom," *Nation*, Sept. 1, 1945, pp. 201-204.
8. Boas, Franz, et. al., *General Anthropology*, Boston, etc.: D. C. Heath & Co., 1938.
9. *Britannica, Encyclopaedia*, 1929.
10. Broglie, Duc de, quoted by Harold Callender, *New York Times*, Aug. 8, 1945, p. 4.
11. *Business Week*, Aug. 11, 1945, pp. 16-17.
12. Chapin, F. Stuart, "Theory of Synchronous Culture Cycles," *Social Forces*, Vol. 3 (1925), pp. 596-604.
13. ———, *Cultural Change*, New York, Century Co., 1928, pp. 51 and 357-384.
14. Churchill, Winston, quoted in *Vital Speeches*, Vol. 10 (July 15, 1944), p. 581.
15. Compton, Arthur H., "Atomic Power in War and Peace," *Saturday Review of Literature*, Vol. 28 (Oct. 27, 1945), p. 18.
16. Condon, Dr. Edward U., quoted from *The Journal of Chemical Education* in "Atom Bomb Warning," *N.Y. Times*, Oct. 28, 1945, p. E9, col. 8.
17. Croxton, Frederick E., and Cowden, D. J., *Applied General Statistics*, 1940, pp. 681-684.
18. *Current History*, Aug. 1937, p. 47.
19. Curt, Ralph Henry, *The Story of Discovery and Invention*, New York: Hillman-Curl, 1935?
20. Daedalus, *Christian Science Monitor*, Aug. 6, 1945, p. 7.
21. Davis, Harry M., "We Enter a New Era," *New York Times Magazine*, Aug. 12, 1945, pp. 5+.
22. ———, "The Atomic Bomb: The Facts and the Issue," *Id.*, Nov. 11, 1945, pp. 5 and 41.
23. Dietz, David, *World Telegram*, Aug. 16, 1945.
24. Douhet, Giulio, *Command of the Air*, New York, Coward McCann, Inc., 1927, 1942, p. 23, footnote.
25. *Durham Sun*, "The Story of the Atom," Sept. 4, 1945, p. 10.
26. Einstein, Albert, interviewed by Howard W. Blakeslee, AP, Boston, Oct. 26, *Durham Morning Herald*, Oct. 27, 1945, p. 1.
27. Eliot, George Fielding, *Bombs Bursting in Air*, New York, Reynal and Hitchcock, 1939, p. 52.
28. Fairchild, Mildred, and Hart, Hornell, "A Million Years of Evolution in Tools," *Scien-*

- tific Monthly, Vol. 28 (1929), pp. 71-79.
29. Gause, G. F., "Experimental Studies on the Struggle for Existence," *Journal of Experimental Biology*, p. 380.
 30. Gray, George W., "Speed," *Atlantic Monthly*, Vol. 145 (1930), pp. 322-331.
 31. Harsch, Joseph C., *Christian Science Monitor*, Aug. 6, 1945, p. 2, vol. 5.
 32. Hart, Hornell, *Technique of Social Progress*, New York, Henry Holt & Co., 1931, pp. 49-146, 438-503, 666-678.
 33. ———, "Can World Government Be Predicted by Mathematics?" Ann Arbor, Mich., Edward Bros., 1944.
 34. ———, "Logistic Social Trends," *American Journal of Sociology*, Vol. 50 (1945), pp. 337-352.
 35. ———, "Depressions, Wars, and Logistic Social Trends," *American Journal of Sociology*, Sept., 1946 (?) (accepted, Nov., 1945).
 36. Haugland, Vern, AP dispatch from Nagasaki, *Durham Sun*, Sept. 10, 1945, p. 10A.
 37. Henzen, Ralph, UP dispatch, *Durham Sun*, Sept. 3, 1945, p. 1; *Id.*, Sept. 9, 1945, p. 1.
 38. Houard, Georges, "Long-Distance Bombardment from Air-Planes, and American Aviation," *Living Age*, Vol. 299 (Nov. 9, 1918), p. 331.
 39. Jaffe, Bernard, "How the Bomb Came to Be," *New Republic*, Sept. 17, 1945, pp. 344-347.
 40. Kaempffert, Waldemar, *A Popular History of American Invention*, 1924, Vol. I, pp. 3-21.
 41. ———, "Smyth Report," *New York Times*, Aug. 16, 1945, p. 8.
 42. ———, "Now That We Have Got an Atomic Bomb, What Do We Expect to Do About It?" *N. Y. Times*, Aug. 26, 1945, p. E9, cols. 7-8.
 43. Kirchway, Freda, "One World or None," *Nation*, Vol. 161 (Aug. 18, 1945), pp. 149-150.
 44. Knibbs, George H., "The Laws of Growth of a Population," *Journal of the American Statistical Association*, Vol. 21 (1926), p. 385.
 45. Kroeber, A. L., *Anthropology*, New York: Harcourt, Brace & Co., 1923, pp. 143, 178.
 46. Kuznets, Simon S., *Secular Movements in Production and Prices*, New York: Houghton, Mifflin, 1930.
 47. Langmuir, Irving, quoted in *Time*, Oct. 22, 1945, p. 26, col. 3.
 48. Lawrence, William L., *New York Times*, Sept. 9, 1945, p. 1.
 49. Lehfeld, R. A., "The Normal Law of Progress," *Journal of the Royal Statistical Society*, Vol. 79 (1916), pp. 329-332.
 50. Lindeman, Eduard C., "Morality for the Atomic Age," *Forum*, Vol. 104 (Nov. 12, 1945), pp. 231-233.
 51. *Literary Digest*, Vol. 108 (Feb. 21, 1931), p. 10.
 52. Long, Tania, "Ruins of Berlin Spur to Peace," *New York Times*, July 22, 1945.
 53. Lowie, Robert H., *Culture and Ethnology*, New York, P. Smity, 1917 (reprinted, 1929), p. 78.
 54. ———, *Cultural Anthropology*, New York: Farrar & Rinehart, 1940, p. 115.
 55. McDermott, William F., "Trailblazer for Streamliners," *Coronet*, Aug., 1943.
 56. McGraw, James H., "Controlled Atoms . . . or Controlled Lives!" *Business Week*, Dec. 8, 1945, pp. 36-37.
 57. Montross, Lynn, *War Through the Ages*, New York, Harper & Bros., 1944, p. 20.
 58. Morgan, Lewis H., *Ancient Society*, New York: Henry Holt & Co., 1877, p. 38.
 59. Mulhall, Michael George, *Dictionary of Statistics*, London, G. Routledge, 1899, p. 65.
 60. Murdock, George P., *Our Primitive Contemporaries*, Macmillan Co., 1934.
 61. *New International Encyclopedia*, New York, Dodd, Mead, & Co., 1929.
 62. *New Republic*, "T.R.B.," Oct. 29, 1945, p. 572.
 63. *Newsweek*, Nov. 25, 1940, p. 28.
 64. ———, Dec. 18, 1944, p. 32.
 65. ———, Aug. 20, 1945, p. 34.
 66. ———, *Id.*, p. 37, col. 1.
 67. *New York Times*, March 26, 1944, p. II 3.
 68. ———, April 27, 1945, p. 11, col. 2.
 69. ———, Aug. 5, 1945, p. 9; Aug. 8, 1945, p. 4; Aug. 12, 1945, p. E1.
 70. ———, Nov. 4, 1945, p. 1; Nov. 11, 1945, p. 8E, col. 2.
 71. ———, "World News Summarized," Nov. 4, 1945, p. 1.
 72. Nichols, Col. Kenneth D., *New York Times*, Aug. 8, 1945, p. 4.
 73. Ogburn, William F., *Social Change*, New York, B. W. Hubsch, 1922 (reprinted, 1928), pp. 103-118.
 74. ———, "The Future of Man in the Light of his Past," *Scientific Monthly*, Vol. 32 (1931), pp. 294-308.
 75. ———, and Nimkoff, Meyer F., *Sociology*, New York, Houghton, Mifflin Co., 1940, pp. 775-808, 869, 904-906.
 76. Oliphant, Dr. M. L. E., quoted, "Dr. Oliphant Pushes the Curtain Back," *Christian Century*, Vol. 62 (Dec. 12, 1945), p. 1341.
 77. O'Neill, John J., "Atom Energy May Be as Docile as Coal," *New York Herald Tribune*, Sept. 9, 1945.
 78. ———, "Science Studies the Atom Bomb as a Weapon of Naval Warfare," *N. Y. Herald Tribune*, Dec. 16, 1945, p. 82, cols. 1-4.
 79. ———, *New York Herald Tribune*, Sept. 23, 1945.
 80. Oppenheimer, J. Robert, quoted in *Time*, Oct. 29, 1945, p. 30, col. 3; same interview AP dispatch, Washington, Oct. 17.
 81. ———, "Atomic Weapon and the Crisis in Science," *Saturday Review of Literature*, Vol. 28 (Nov. 24, 1945), pp. 9-11.
 82. Palmer, Frederick, "Navy's Size No Longer

- Factor," *Durham Morning Herald*, Aug. 29, 1945, p. 4.
83. ———, "At Moscow," *id.*, Dec. 23, 1945, p. 4, cols. 5-7.
 84. Pearl, Raymond, *Introduction to Medical Biometry and Statistics*, Philadelphia: W. B. Saunders Co., 1940, p. 461, formula (vi).
 85. ——— and Reed, Lowell J., "The Curve of Population Growth," in *Pearl's Studies in Human Biology*, Baltimore: Williams & Wilkins, 1924, pp. 558-637.
 86. *Philadelphia Enquirer*, Aug. 2, 1943, p. 1.
 87. Plimmer, Denis, "General Marshall's Report," *New Republic*, Oct. 29, 1945, p. 562.
 88. *PM*, Aug. 8, 1945, p. 3.
 89. Reed, Lowell J., "A Form of Saturation Curve," *Journal of the American Statistical Association*, Vol. 20 (1925), p. 391.
 90. Robinson, James Harvey, *The New History*, New York: Macmillan Co., 1912, pp. 239-240.
 91. *Science News Letter*, Sept. 1, p. 130, "Deadly Bombers."
 92. *Scientific American*, Vol. 88 (June 6, 1903), p. 426; Vol. 91 (Aug. 31, 1904), p. 115; Vol. 92 (Feb. 11, 1904), p. 127; Vol. 94 (Feb. 3, 1906), p. 115; Vol. 136 (June, 1927), p. 386; Vol. 162 (Jan., 1940), p. 15.
 93. Schlegel, Richard, "Scientists of the World, Unite!" *Nation*, Vol. 161 (Nov. 17, 1945), pp. 515-516.
 94. Shallet, Sidney, "Pattern of Future War Is Changed," *N. Y. Times*, Aug. 12, 1945, p. 1, col. 6; p. 4, col. 3.
 95. Simms, William Philip, *World Telegram*, Aug. 10, 1945.
 96. Smyth, Henry DeWolf, *Atomic Energy for Military Purposes*, Princeton Univ. Press, 1945.
 97. Sorokin, Pitirim, *Social and Cultural Dynamics*, New York, American Book Co., 1937, Vol. III.
 98. ———, "Index of War Intensity of Eight Principal (European) Countries," cited in Quincy Wright's *A Study of War*, Univ. of Chicago Press, 1942, Vol. I, p. 655.
 99. Spaatz, Gen. Carl A., "Air Power in the Atomic Age," *Colliers*, Vol. 116 (Dec. 8, 1945), pp. 11-12, 83-84.
 100. Spaulding, Oliver, *et al.*, *Warfare*, London, George G. Harrap, 1937, pp. 46 and 536.
 101. Stern, Bernhard J., "The Challenge of Advancing Technology," *Annals of the American Academy*, Vol. 242 (Nov., 1945) pp. 46-52.
 102. Stewart, Major Oliver, "Bombing Balance Sheet," *Flying*, Vol. 37 (Sept., 1945), p. 22.
 103. Straley, Joseph, "Scientist Explains Source of Energy of New Atomic Bombs," *Durham Morning Herald*, Aug. 14, 1945.
 104. Sutherland, Robert L., and Woodward, Julian L., *Introductory Sociology*, Lippincott, 1940, pp. 69-79.
 105. *Time*, Aug. 13, 1945, p. 17.
 106. ———, Aug. 20, 1945, pp. 29-30.
 107. ———, Nov. 12, 1945, pp. 28-30, "The Atomic Age."
 - 107.5 ———, Jan. 28, 1946, p. 24, "Weapons."
 108. *United States News*, Aug. 17, 1945, p. 21, "The Future of the Atomic Bomb."
 109. UP dispatch (unsigned) San Francisco, Aug. 23, 1945, *Durham Morning Herald*, Aug. 24, 1945, p. 2.
 110. Verhulst, P. F., *Recherches Mathematiques sur la loi D'accuisment de la population*, *Mem. de L'Acad. Roy. de Bruzelles*, t. 18 (1844), pp. 1-58.
 111. Vernon, Arthur, *The History and Romance of the Horse*, Boston, Waverly House, 1939, p. 410.
 112. Wallis, Wilson D., *Culture and Progress*, New York, Whittlesey House, 1930, pp. 410-415.
 113. Wickware, F. S., *Life*, Aug. 20, 1945, pp. 100-102.
 114. Wilson, Edwin B., and Puffer, Ruth R., "Least Squares and the Laws of Population Growth," *Proceedings of the American Academy of Arts and Sciences*, Vol. 68 (1933), p. 288.
 115. *World Almanac*, New York, World Telegram, 1945.
 116. *World Telegram* (New York), Aug. 17, 1945, p. 2.

THE SMALL WARSHIP

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MY EXPERIENCE in World War II was different, I believe, from that of most social scientists who entered government service. For many years I had been an officer of the Naval Reserve, so that when the time came, instead of being assigned to some such field as public opinion analysis or military government, which were obviously related to sociology as an academic discipline, I was sent to sea as an ordinary line officer. And out of four and a half years on active duty, more than two were spent in command of small ships engaged in anti-submarine warfare and escort of convoy operations. Looking back on it, I feel that I was extremely lucky to have had this kind of responsibility, but I am not indulging in reminiscence for its own sake. If, in the end, sociology does not teach students something they can actually use in handling men effectively, it is nothing. Eventually we must be able to do that, or we shall not be worth our salt. I wish we could say that we do it now. I myself learned much from sociology which made me a more effective sea captain than I should otherwise have been. The point I am making here is that I did not do a better job than the young man who was educated, intelligent, sensitive—who was, as we used to say, “a good joe”—but who had not been exposed to social science. We do not yet teach leadership. It must be taught, soon and well, if we are to train the men who will hold our industrial civilization together.

If the average sociologist, like myself, cannot do a better job of leadership than the average intelligent young man, he should at least be a better observer. I think I did learn, usually by making mistakes, some of the factors which make for good or bad morale on a small ship: a group, shall we say, of not more than two hundred men, differing from other groups of comparable size in being isolated and self-contained,

sometimes for weeks at a time. Nothing that I learned was new,¹ except in its application to this particular *milieu*, and nothing complex. No doubt our intellectual elaboration in this field will keep pace with our ability to teach a skill. Note also that I say some of the factors in morale. I make no pretense of including all of them. For instance, there is formal discipline. Armies and navies have had hundreds of years of experience in formal discipline, and most of the remarks wise officers have made on that subject seem to me well taken. The factors I shall speak of are less often discussed in professional military circles, though often in fact well handled. They are: the problem of technical competence, the problem of balance, the problem of reciprocity, and the problem of communication.

The problem of technical competence. All warships work with other warships, and comparisons are always being made between them. When a group of ships has been together for a long time, the character of each is well established and the subject of the most ribald comment. How quickly does U.S.S. *Blank* react to a submarine contact? How many hits does she get shooting at a towed sleeve? What kind of chow does she serve? What kind of guy is her skipper? All these things come up for discussion. Take a minor problem like coming alongside a pier. Almost always other ships are present in port, and men from these ships will be on the pier to handle the lines. If the captain misjudges his approach and scrapes off some of his paint, if the engine room force does not back the engines promptly when ordered, if the gang on the fantail allows the stern line to get fouled in the screw, the fact will be observed with delight and remembered. Now no seamen wishes to be one of the

¹ See especially F. J. Roethlisberger, *Management and Morale*, Cambridge, 1941, pp. 109-113.

crew of a ship whose reputation is not good. The kind of smartness he asks for may not be the kind admired by many officers. He is a man of sense and loves sound seamanship and sound cooking more than a magnificent paint job. But there are certain practical, simple things about the mission of the ship which must be properly handled if his willingness to cooperate is to be kept at a high level. Morale is just a fancy name for willingness to cooperate.

These things are the responsibility of the captain. They demand all his skill in organization and training. We used to comment ruefully on the fact that if anything went wrong, at any time, anywhere on the ship, the Navy automatically blamed the commanding officer. It does seem unfair at times, but the instinct behind it is sound, since the crew itself, the men most concerned, blame him too. The excellent Army pamphlet on absence without leave emphasizes that the commanding officer is in fact responsible for every unauthorized absence which occurs in his unit. He must contrive that conditions which favor loyalty to the group are maintained everywhere in his command. And the first among these conditions is that the command shall be known as one which is doing an important job, has the means to do it, and does it well. Without this, nothing else in morale is possible, but all the factors are interdependent, and unless the others are adequately handled, technical competence itself will fail. Discontented men are not good seamen. They will "slow down" as surely as their brothers in industry.

The problem of balance. Like other societies, large and small, the crew of a ship does not consist of an undifferentiated mass of men but is segmented, largely on the basis of rank and job. In the class structure, if we may call it that, there are three main levels: the commissioned officers, the chief petty officers, always called "chiefs," and the rest of the sailors, with a less important distinction among these others between the "rated" men and the "non-rated" men. In the grouping by jobs, there are two main units and several smaller ones. The deck force is represented by the gunner's mates,

the boatswain's mates, and the non-rated seamen. Their work is mostly topside, and I must report that they are sometimes referred to as "deck apes." The engineering force is represented by the machinist's mates, the electricians, and the non-rated firemen. Their work is mostly below decks, and they are known as the "black gang" or the "snipes." (The origin of the latter word is still in dispute.) These are the big groups; there are several smaller ones. One is the bridge gang, made up of the signalmen and quartermasters who work in the immediate neighborhood of the bridge. Another is made up of the radiomen. Then there are a number of specialties, no one of which musters more than a handful of individuals on any one ship: cooks, steward's mates (negroes), yeomen, pharmacist's mates, carpenters, and shipfitters. Some of these segments are marked by differences in uniform; almost all are set apart by subtle differences of behavior, which would not be immediately obvious to an outsider and which even a Navy man would have a hard time describing, although he is acutely conscious of them. Even the angle at which a chief wears his hat is distinctive.

Since every ship has to meet the same fundamental demands and remain self-sufficient, every ship has on board at least a few members of each of these groups. This fact implies that the crew of a small ship is actually more differentiated than its numerical size might suggest. At the end of centuries of experience—and it can be argued that the western world has had a longer experience with ships than with any other form of elaborate working group—the organization of any warship is essentially that of every other ship of the fleet. This similarity, which enabled a newcomer aboard ship to find his way around socially with a minimum of bewilderment, was one of the factors which allowed the Navy to absorb the enormous numbers of transfers between ships which took place throughout the war. Furthermore, perhaps again as a result of the long tradition, it always seemed to me that the actual social groupings of men, seen in the friends who went around together when

on liberty, corresponded fairly closely to the segments called for by the formal organization.

Here, then, are a number of small groups of men, their sharp differentiation by job being heavily reinforced by tradition. The problem is that one of these groups may set itself in opposition to another or to the ship's company as a whole. I recall one ship which received on commissioning a draft of young seamen who were fairly new to the Navy but who had recently served together in the North Atlantic convoy routes. This was before Pearl Harbor, when the Navy as a whole had not taken part in a shooting war. Naturally enough, the members of this group were cocky, and a series of incidents occurred in which they were insubordinate to the chiefs, who were old hands at the Navy but who had not yet received the accolade of action.

In this connection, I think more often of another incident. On a large vessel, the deck force, the engineering force, and the other groups that make up the ship's company are physically separated while at work to an extent unknown on a small ship. They may lose some sense of unity, but much friction is also avoided. Now it is a doctrine of the Navy that all men should be at work during "turn to" hours, whether or not they happen to have a watch. A ship I commanded was cruising in tropical waters. The engine room was small and hot, and the high-speed diesels were noisy. Under these conditions we threw doctrine overboard and did not require the engineers to work in the engine room throughout the day, though of course they had to stand their regular four-hour watches. The case of the deck force was different. These men worked topside, where there was plenty of breeze to temper the hot sun. Furthermore, their labors were urgently required. The battle against rust which is fought on a small ship is endless and without quarter. Unfortunately the engineers used their leisure time sun-bathing and reading on deck in full view of the seamen who were sweating it out at paint-chipping. Let me add that I believe that the morale of the deck force on a long voyage where

the chance of action is remote tends to be low in comparison with other groups. The deck force has the dirty jobs of maintenance: chipping, painting, slushing down, which do not bear immediate comparison in interest with, for instance, the work of the quartermasters on the navigating bridge or the work of the machinist's mates in the engine room. On this occasion it appeared to the officer in charge on deck that the efforts of his seamen were not being spurred on by the sight of the engineers taking it easy, and I gave the order that, so long as the deck force was at work, the engineers, while still not required to turn to, should spend their leisure time elsewhere than topside. I am sure that I made a mistake, for as soon as I gave the order the black gang let me know that it was being discriminated against, and the whole issue of balance was raised. As on so many other occasions, I should have done much better if I had done nothing, although there was a real difficulty which called for some solution.

The chance that the problem of balance may assert itself must always be in the skipper's mind, together with the recognition that there is no single, simple way of handling it. A ship's party, when all hands, officers and men, go ashore to play a game of baseball against another ship, the loser providing the beer, reinforces in the ship's company a sense of unity, but only if this unity exists to begin with. It must be created in the work of every day, not in special occasions. The skipper could not, even if he wished, break down the segments into which his crew is divided, and their corporate strength, enlisted in the common effort, will serve him well. What he must do is take care that no one segment sets itself apart from the rest and against them.

The problem of reciprocity. It is well recognized that a good leader should look after his men. It is not so well recognized that he should look after them in the matters they consider important and not simply in the matters the commanding officer and his superiors consider important. On a small ship some of the items were obvious, and the most obvious was pay. Many of the men had

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made allotments for the support of their dependents. It made all the difference to their enjoyment of liberty that the small amounts which still came to them for their personal expenses should arrive on time. In the early part of the war, before the Navy devised a plan for meeting just this problem, it was not simple to arrange. A small ship did not carry a disbursing officer; her accounts were held at a base, often a long distance from the area in which she was operating. Sometimes the sailors did not get paid on pay-day, though they were always paid eventually. Furthermore, the Navy has a complicated pay system. There is a good reason for each of the complications but they did not always make it easy, in the absence of a disbursing officer, to satisfy the men that they had received the proper amounts. A commanding officer had to do everything possible to see that the men were getting what they rated, and, what is much more important, show that he was doing it, even if it meant carrying on guerrilla warfare with the rest of the Navy. It was unfortunate that sometimes a sharp remark from his own superior officer helped the skipper prove to his men that he was fighting for them.

The commanding officer had to see that the men were getting all that was coming to them in the matter of promotions and transfers. The Navy had an admirable set of service schools, up to and including the Navy College Training Program. Aside from the chance for advancement, almost all of these carried with them the most prized of rewards—"going back to the States." Further, the commanding officer was continually being called upon, in a Navy which was expanding like an explosion, to send a certain number of men back to the United States to man newly built ships, the choice of men being, within limits, left to him. He was always under the temptation to use these openings to send his worst and not his best men away. It seemed an easy means of getting rid of a man who was hard to handle, and it often looked as if the ship just could not get along without certain key technicians. It never paid to yield to the temptation. Rewarding a man for good and faithful service

obviously strengthened the spirit of the ship, and, with this spirit, you always found that you could train, much more rapidly than you had believed possible, a new expert to take the place of the one lost.

The commanding officer had to see that his men were protected against unnecessary irritations, even when it meant protecting them against the Navy itself. Uniform, for instance, was sometimes a vexing matter. In the peacetime Navy, a sailor is required to wear the "uniform of the day" unless he is doing obviously dirty work, in the engine room or overside, when he is allowed to wear dungarees. In the West Indies in 1942-43 the rule was still in force. Unfortunately the uniform of the day was "whites," and the ship in question was operating out of the great oil port of San Nicholas, Aruba, where crude oil floated in rafts on the water and oozed from every bit of piling, and where every line hauled back aboard the ship spread the sticky muck over the decks. Under these circumstances, whites could be worn on liberty without too much trouble, but it was impossible to keep them clean for any length of time on board ship. Any work was, in effect, dirty work. The Navy rules about uniform had to be disregarded, and were disregarded. The crew wore dungarees at all times.

I should have a hard time implementing in detail the remarks that follow but I set them down for what they may be worth. A number of officers who were familiar with the British Navy felt that, in comparison, our own navy was "hard on its men." Granting that the distant field is always greenest, these officers believed that the British Navy allowed its sailors to take it easy when there was no obvious reason for keeping them on their toes, and that this kind of relaxation was important in maintaining resilience. The British paid a price for what they did. At least an article in the American credo was: "Limey ships are filthy." The United States Navy, on the other hand, in its very desire to be clean, efficient, and well trained at all times, tended to put its men through a number of activities the necessity of which was not always clear to them. They tended to

be over-trained, in the athlete's sense of the word. I think there is a national difference at work here and not simply a difference of naval policies. In any event, a sailor, as a member of a military organization, is subject to a vast number of orders and regulations which he must obey without question. For the maintenance of his personal integrity, he must be able to escape from the organization at times. He must have all the liberty that can conceivably be given him, and when he is on board ship the rules which govern his life with his fellows must be as clear and simple as possible. Far from being multiplied, they should be cut down to the point of anarchy.

Much of the action that a commanding officer takes to help his men he is required to take by the regulations of the Navy. And nothing he does is in any sense a favor. The relation between himself and the crew is never that of politician and clients. If he ever claimed something from his subordinates in return for the good deeds he had done on their behalf, he would get nothing more than some exceedingly irreverent remarks made behind his back. At the same time, nothing he does is taken wholly impersonally. Only if the skipper is doing his best for the men, and they know it, will they do their best for the ship. This is the meaning of reciprocity.

The problem of communication. Adequate communication is a two-way process, moving both upward and downward in the organization. Of the two, the latter, the job of explaining to the crew the action which the commanding officer and his immediate assistants believe should be taken, is the easier and the more obviously necessary, but it is by no means absolutely easy. Take the matter of conserving water. In the tropics the demand for water always exceeded the supply. Men drank much water, and they wanted to take showers as often as they could. Yet the evaporators were barely adequate at best; they were notoriously delicate, and the commanding officer had to bear in mind the necessity of maintaining a sufficient reserve in the tanks to enable the ship to reach port even if the evaporators failed

completely. One might think that these rather simple considerations could have been explained to the intelligent young men who made up the crews of our ships as something which concerned, not the higher-ups only, but every member of the ship's company. I believe that many a commanding officer could relate incidents which showed that they had not been so explained. Perhaps the fact that most of the sailors had recently come from civil life, where water was one of the things there was always plenty of, had something to do with what happened. Perhaps the rules for the conservation of water were looked upon as just some more of the many restrictions imposed on the men from above. In some cases, the ship's company had not been together long enough. The Navy expanded violently throughout the war, and sometimes officers and men were only just beginning to understand one another when a good number of them were taken off the ship to man new construction. I do not know the answer, but the fact is that communication downward often failed.

If communication downward failed, how much more likely was it that communication upward, a kind which is, formally at least, not encouraged in military organizations and sometimes even discouraged, should fail also. I have said that the skipper must take care of the crew in those matters which they consider important and not simply in those which he, or the Navy, considers important. How can he tell what these matters are? How can he tell what pressures are building up that may threaten the balance of the organization? To put the matter more simply, I think that an honest commanding officer would be devastated by an effort to answer the question: "What do I know about the crew?" Without the score, he may play well by ear, but he cannot be sure he is doing a good job in building morale.

I do not think that the chaplain is the answer to the problem of upward communication. To say this is to imply no disparagement of the corps of chaplains. The job does not really belong to them. If a man has something on his mind which involves his family or his life away from the ship, it may be

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sensible for him to go to a chaplain who is trained to be a good listener. But many of his preoccupations will concern his life with his shipmates, both officers and men. Now it was generally recognized in the Navy that a man who took his troubles to the chaplain took them, in effect, outside the organization. If a man was irritated by something in his naval experience, it was a common joke to offer him the chaplain's address, with the understanding that he would have a good chance to blow off steam but that no other change in the circumstances would ever, by any possible coincidence, be made. Many of the matters about which men were told to talk to the chaplain carried important implications for morale. With the chaplain they stayed. As far as I know, the chaplain was not commonly consulted by the commanding officer. In any case, he could not have violated the specific confidences he had received, and he was usually too far removed from the daily work of the ship to interpret the general implications of the confidences. Yet I assume that any matter whatever which in fact concerns morale should ultimately be transmitted to the man who is responsible for morale, that is, the commanding officer. And I do not consider insoluble the problem of transmitting this kind of information in such a way that no individual will be injured and that the ship will not seethe with gossip.

Small ships did not have chaplains, yet there was usually at least one man on every small ship who was a good listener and to whom sailors would talk freely as they would to no one else. Though such men were invaluable, they were incapable by themselves of encouraging communication throughout the organization. I am thinking of a pharmacist's mate on one of my ships and the executive officer on another. The latter had been a member of the relief organization of a southern state and was a good natural interviewer. Many of the men got into the habit of talking to him. He was always available and always interested. Now immediately below the executive officer in the ship's organization was a chief boatswain's mate with more than twenty years of splendid service

in the Navy. He had come to our little escort vessel from an important job on a much larger ship in which the pre-war Navy traditions were still dominant. Rightly or wrongly, he interpreted his transfer as a come-down, and though he never said so, I am afraid that at the time in question, which was early in the war, he considered some of us naval reserve officers absolutely crazy. I still do not know whether his high blood pressure was the cause or the effect of his experiences with us. Extremely competent as a seaman, he still had some difficulty fitting into the organization, until he began to know us all better, when we became good friends. At any rate he was in immediate charge of many of the men who were in the habit of talking to the executive officer whenever they felt the need of getting something off their chests. As the chief saw it, they were going over his head, and he protested to me. It is true that the executive officer had never disclosed anything he had heard, or taken any action on it, and outside of being interested in what they had to say, was not treating the men as his intimates. Yet the chief's view of the matter: that the men were jumping a link in the chain of command, had some cogency.

The incident is significant. It is not enough that the captain should announce that "his door is always open." The prestige that surrounds "the old man" will prevent most sailors from crossing the threshold. It is not enough that there should be some one person who can be counted on to listen sympathetically to anything a sailor wants to talk about, especially if the person in question is to some extent outside the group. It is essential that at every level of the organization men should be trained to listen with interest and attention, and without interrupting, to everything their subordinates are trying to say, trained also to fit what they hear into some relevant picture which they in turn can communicate. I do not know whether anything of this sort can be built up. I do feel that something of the sort is required if the commanding officer is not simply to play by ear in the matter of morale.

At the end, as always, I return to the com-

manding officer. In the ship's roster of officers, morale is listed as one of his special charges. By ancient tradition, he is the last to leave the ship if she goes down. He is held responsible by the Navy for anything that goes wrong, and it is right that he should be, for I believe that he is, in fact, responsible and is so considered by the men under him. To help him bear this burden, he is, in theory, made dictator aboard his ship, but, as he stands on the bridge and gives his orders, no one is more aware that he is helpless without the willing cooperation of the crew. And he is the man above all others who may, at any moment, put that willingness in jeopardy. He is subject to strains unlike those met by an executive in civil life. He is on call at all times; his judgment may be warped by lack of sleep. He is still more dangerous when he is angry. Much of the work of a warship is of an emergency nature. If a mistake is made at a crisis, it is only

human for him to be furious; his fury will be in proportion to his desire to do a good technical job, and it will take the form of an overwhelming urge to bawl somebody out. It is then that he must watch himself. I suppose that if one is going to give a reprimand, there is some virtue in giving it on the spot, immediately after the mistake has been made. This is the theory we follow with a pet: we "rub his nose in it." And I suppose, too, that in military organizations there is a general recognition of the strains put on officers and a greater readiness to put up with a bawling out than is usual in civil life. But the risk is not worth taking; there is too much danger that a humiliation in front of his fellows will turn a man into a rebel. The skipper must keep his mouth shut, if he can, and then the time may come when he wonders whether he is learning more about the crew than about himself. This is not the least of the rewards of command.

THE SOCIAL FACTORS OF THE WORK SITUATION*

DELBERT C. MILLER

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SOCIAL science research has only lately turned to the study of the social structure of work groups and the socialization of personality within the social systems of factory, office, and store.¹ Five major approaches to the sociological study of work groups can now be discerned. These are:

1. The Factory as a Social System
2. The Study of Specific Occupations

* Presented to the American Sociological Society, Cleveland, Ohio, March 1, 1946. The writer is indebted to his departmental colleagues, William H. Form and James T. Laing, for many critical suggestions. The discussions of the manuscript by William F. Whyte, University of Chicago, C. Arnold Anderson, University of Kentucky, and Henry J. Meyer, Wage Stabilization Board, are appreciated.

¹ Two outstanding research monographs are: F. J. Roethlisberger and W. J. Dickson, *Management and the Worker*, Cambridge, Massachusetts, 1943; Elton Mayo and George Lombard, *Teamwork and Labor Turnover in the Aircraft Industry of Southern California*, Cambridge, Massachusetts, 1944.

3. The Social Psychology of Occupations
4. The Study of Interpersonal Relations in Work Situations
5. Business as an Institution

1. *The Factory as a Social System.* The concept of factory as a social system has guided or emerged from most of the research that has been done.² Work situations are viewed as a complex pattern of interrelationships which form social systems. Participation in the formal, authoritative structure of management is observed to be intertwined with participation in informal, primary groups. The social behavior which results

² See especially F. J. Roethlisberger and W. J. Dickson, *ibid.*, 551-568; Burleigh B. Gardner, *Human Relations in Industry*, Chicago, 1945; W. Lloyd Warner and J. O. Law, *The Social System of the Modern Factory*, Vol. IV Yankee City Series, New Haven, (forthcoming); Wilbert E. Moore, *Industrial Relations and the Social Order*, New York, 1946.

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from the interplay of controls from these symbiotic social structures is given special attention.³

2. *The Study of Specific Occupations.* The exploration of specific occupations involves intensive study of one occupation by the method of constructive typology. This work, by its concentration on one vocation, requires tremendous effort to cover the wide range of occupations within modern economic structure. Yet, when well done, it provides rich insights into the effect of vocation as a factor which influences group membership and personality development.⁴

3. *The Social Psychology of Occupations.* Public opinion polling has shown that occupation and economic status are of great influence in determining attitudes on a great number of public and personal issues. Yet not much has been done to explore the life experiences to find out *how* attitudes become incorporated into personality patterns as the result of occupational membership. It has been proposed recently that a more systematic study of the social psychological attributes of each occupational level be developed. Form's study of social psychological traits of manual and white collar workers is a promising lead into the dynamics of personality socialization.⁵ Moreover, the interactional chronograph, invented by Chapple and Donald, has already demonstrated that personality traits of business and industrial leaders can be identified and recorded through observation of their social behavior.

³ Conrad M. Arensberg, "Industry and the Community," *American Journal of Sociology*, 48; 1-12, July 1942; Elton Mayo, *The Social Problems of Industry*, Cambridge, Massachusetts, 1945; T. N. Whitehead, *Leadership in a Free Society*, Cambridge, Massachusetts, 1937.

⁴ L. Wilson, *The Academic Man*, New York, 1942; Nels Anderson, *The Hobo*, Chicago, 1923; F. R. Donovan, *The Saleslady*, Chicago, 1920; *The Woman Who Waits*, Boston, 1920; William F. Whyte, *Human Problems of the Restaurant Industry*, New York: McGraw-Hill & Co. (forthcoming, Spring 1946).

⁵ William H. Form, "Toward an Occupational Social Psychology," *Journal of Social Psychology*, (forthcoming); See also C. Wright Mills, *The White Collar Worker*, (forthcoming).

The validity of their methods is convincing.⁶

4. *The Study of Interpersonal Relations in Work Situation.* J. L. Moreno has pioneered in the measurement of interpersonal relations.⁷ His methods are now being applied to the measurement of the interpersonal feelings of participants in work groups.⁸ The spontaneous feelings of workers are sought as each reveals his *attraction*, *repulsion*, or *indifference* to fellow workers. Likewise, the choices of working partners are revealed by asking the worker to state a certain number of persons with whom he would prefer to work. Choices are ranked in order of preference. Then, charts called sociograms, are constructed to show the structure of interpersonal relations in any work group, department, office or plant. These charts open the way for a rational placement of personnel so that the highest possible morale and *esprit de corps* may be developed in work groups. Moreover, the role-playing methods of the psychodrama are now being applied to the study and training of workers and supervisors.⁹ Lundberg has been successful in demonstrating the application of Sociometry to Marketing, and his theoretical work is now being applied by the advertising and research departments of the Curtis Publishing Co.¹⁰

⁶ Eliot D. Chapple and Gordon Donald, Jr. "A Method for Evaluating Supervisory Personnel," *Harvard Business Review*, Winter 1946.

⁷ J. L. Moreno, *Who Shall Survive?* Nervous and Mental Disease Publishing Company, Washington, D.C., 1934.

⁸ John H. Jacobs, "The Application of Sociometry to Industry," *Sociometry*, 8:181-198, May, 1945; Helen Jennings, *Leadership and Isolation*, pp. 226-232, New York, 1943.

⁹ Psychodramatic training of foremen in industry is being conducted by Dr. John R. French at Hardwood Manufacturing Company in Marion, Virginia; a psychodramatic course is being given for the training of sales and restaurant personnel at O. P. Baur Confectionery Company, Denver, Colorado.

¹⁰ G. A. Lundberg, "Marketing and Social Organization," Charles Coolidge Parlin Memorial Lecture, Curtis Publishing Company, 1945. In his lecture Lundberg shows that "key" or "natural" leaders exercise great influence over the attitudes and choices of others. The Curtis Publishing Co. has recently sought to discover these key leaders in a

Kurt Lewin and his associates have been conducting experiments that have direct implications for leadership in work groups.¹¹ His studies in experimentally created social climates of democratic and authoritarian character have revealed significant differences in the behavior of the group members and the group leader. The success achieved in the retraining of leaders for democratic participation and direction is most promising.

5. *Business as an Institution.* The concept of business as an institution refers to the patterns of attitudes and social roles developed about jobs and work groups. The major concentration is upon the study of the social structure of work groups and the socialization of personality in the social environment of specific work plants. Every occupation is included within the scope of such study. All of the different work plants—factory, store, farm, mine, office, and home are embraced within the definition. So conceived, the study of business as a social institution has been largely neglected.¹²

community and to ascertain their influence over others in the choice of grocery stores which their friends patronize. The Company has also sought to determine the influence of these key leaders over the choices of brands which the grocer stocks. Their findings have been recorded in a confidential report, *Grocery Dealers Survey of Kent, Ohio*, Curtis Publishing Co., Research Department, Philadelphia, December, 1945.

¹¹ Kurt Lewin, *Principles of Topological Psychology*, New York, 1936; K. Lewin, R. Lippitt, and R. K. White, "Patterns of Aggressive Behavior in Experimentally Created Social Climates," *Journal of Social Psychology*, 10: 271-299, May, 1939; Alex Bavelas and Kurt Lewin, "Training in Democratic Leadership," *Journal of Social and Abnormal Psychology*, 37: 115-119, January, 1942.

¹² Some exceptions include F. Stuart Chapin, *Contemporary American Institutions*, New York, 1935; J. K. Folsom, Chapter XVII, "The Problem of the Home," in *The Family and Democratic Society*, New York, 1944; E. William Noland, "Worker Attitudes and Industrial Absenteeism," *American Sociological Review*, 10: 503-510, August, 1945; *Ibid.*, "An Application of Scaling to An Industrial Problem," *American Sociological Review*, 10: 631-642, October, 1945; James T. Laing, "The Negro Miner in West Virginia," *Social Forces*, 14: 416-422, March, 1936; J. T. Laing, "Social Status Among Migrant Negroes," *Social Forces*, 16: 1-7, May, 1938; J. O. Reinemann, "Extra Marital Relation

The Purpose of This Paper. From the five directions that have been described, there is emerging a body of data and theory that awaits synthesis. The dim outlines of an emerging *Industrial Sociology* can be foreseen. It is the purpose of this paper to describe a research project which may partially open the way to some of the new problems that must be solved in the development of this field.¹³

THE RESEARCH QUESTION

The following is an analysis guided by the concept of business as an institution. It assumes that the job is the unit of observation in such a concept and it purports to analyze the social setting of jobs. The term, *work situation*, is used to convey the notion of an organic relationship between the technical detail of the job and its interlocked social and physical environment which describe a setting for every job. The description of the social character of specific jobs has lagged far behind technical description. The idea that occupations require social skills seems not nearly as well developed. We have been taught during most of our lives to think about jobs as technical skills. Thus, an engineer is regarded as one who learns engineering techniques, a carpenter as one who has acquired specialized woodworking skills, and a physician as one who has mastered materia medica. Even the college professor is considered a person who reads books, talks about them abtrusely, and spends most of

with Fellow Employees in War Industry as a Factor in Disruption of Family Life," *American Sociological Review*, 10: 399-404, June, 1945; Svend Riemer, "Maladjustment to the Family Home," *American Sociological Review*, 10: 642-648, October, 1945; J. Roy Levey, "The Modern Industrial Working Woman," *American Sociological Review*, 8: 720-722, December, 1943; Orvis Collins, "Ethnic Behavior in Industry: Sponsorship and Rejection in a New England Factory," *American Journal of Sociology*, 51: 293-298, January, 1946.

¹³ This paper describes one of a series of research projects which will be published in the forthcoming text, *Industrial Sociology; An Introduction to the Sociology of Work Relations*, by Delbert C. Miller and William H. Form for Harpers & Bros., Publishers.

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The power of stereotypes and incomplete job descriptions to mislead student, vocational counselor, worker, and personnel director can be great, and enormously expensive. The tremendous waste due to labor turnover, transfer, and absenteeism may be partly accounted for by the ignorance of the social setting as men and jobs are improperly matched. Such recognition of the social skills necessary for work as does exist is usually expressed in such statements as, "You have to be able to get along with people in that job," or "She is good at that job because she has a pleasing personality," or "I like the job because it gives me a chance to get away from a desk and meet people." These folk observations reveal a sensitivity to the social characteristics required in some occupations but certainly do not describe the pattern of social relations which compose the social milieu within which each occupation is set. The social environment of every job requires unique adjustments from each person who undertakes the responsibilities of the work. It can be readily understood that these social environments are characterized by great diversity not only between but within the same occupation. Moreover, widely different personalities are to be found in any given occupation. The scientific task requires a reduction of this complexity and the discovery of uniformity. Therefore, the question arises, *"Is it possible to find common social factors that underlie and characterize all occupations?"* This question narrows the search to the examination of the *social structure* of the work situation as found in the manifold varieties of occupations. The structural aspects refer to those characteristics of an occupation which exist by reason of the function that defines it. For example, the social status of an occupation such as doctor, mechanic or executive has meaningful connotation apart from any given individual who may work with these job titles. It must be clearly understood that attention in this study is focused on the *job* and no consideration is made here regarding the personality

traits of any individual who is now or may be employed in a given occupation. This study is not concerned with the reactions and adjustments of the individual worker as he performs his work. However, it is to be hoped that this concentration upon the social structure of the work situation will make the matching of men and jobs a much more efficient process as the industrial sociologist of the future supplies sociometric profiles of jobs and the industrial psychologist furnishes personality profiles of potential workers.

SPECIFIC PURPOSES AND METHODS

The purposes of this study are: I. To identify the most important social factors which are common to work situations; II. To construct a sociometric scale to measure the vocational social ability required by different occupations; III. To make a social evaluation of jobs in a small industrial company; and IV. To prepare sociometric profiles of selected jobs. These purposes call forth the maximum of observational experience that can be brought to bear. The writer has used his two years of recent experience within a large industrial plant of 35,000 workers in which he had an opportunity to observe every kind of work behavior in the company preparatory to training workers and assisting in job evaluation. A year spent in examining job evaluations as presented by American industries to the National War Labor Board has been useful in widening the range of work behavior studied.¹⁴ In determining the most important social factors of work and in judging their relative weight personnel directors, psychologists, sociologists, college deans, vocational counselors, college appointments officers, and vocational education directors have been consulted. The methods used in constructing the scale and evaluating jobs will be described under the appropriate section in the following pages.

¹⁴ Assistant Supervisory Training Supervisor, Sperry Gyroscope Company, New York City, 1942-1944; Section Chief, Wage Analysis, Policy Appraisal Division, National War Labor Board, Washington, D.C., 1944-1945.

I. THE SOCIAL FACTORS OF THE WORK SITUATION

In order to identify common social factors of work situations it is necessary to divorce arbitrarily each occupation from its technical function. When stripped of their usual referents, jobs which seemed wide apart suddenly reveal themselves in striking similarity. For example, let us consider such different occupations as represented by physician and barber. If we examine the nature of their social contacts, many similarities can be noted. Both are similar in that each has face-to-face contact with clients or patrons who seek a special service. Each may meet persons from all the different social classes of the community or each may have special clienteles. Each may have its own workshop and may be his own boss. Each must learn to avoid pressing his own political and social opinions on his clients. While there are obvious differences in the technical work and in the social status of the two occupations, the point to be emphasized is that an analysis of social characteristics of each reveals similarities where a comparison of jobs in terms of technical skills only accentuates the differences and hides these similarities.¹⁵

When observation is disciplined to seek out the social skills of jobs, so often screened from view by their technical and status connotations, then, common social elements can be discovered. From a survey of many hundreds of jobs the following seven social factors were selected as the most important characteristics common to all jobs.

Social Factors of the Work Situation

A. Scope of Social Contact

1. Direct contact with customers or general public.
2. Direct contact with working associates.

3. Direct contact with both customers or general public and working associates.
4. None or infrequent contacts.

B. Status Range of Social Contacts

1. Contact with business class, i.e. with those who address their activities in getting their living predominantly to *people* in the selling or promotion of things, services, and ideas.
2. Contact with working class, i.e. with those who address their activities in getting their living primarily to *things*, utilizing material tools in the making of things and the performance of services.
3. Contacts with both business and working class.

C. Social Demands when "off the job"

1. No social entertainment "off the job" required.
2. Entertainment of customers or influential persons required.
3. Entertainment of working associates or influential persons expected.

D. Social Leadership

1. Secure disciplined and co-operative response from persons who are expected to so respond because of the authority vested in the position by the business institution.
2. Secure disciplined and co-operative response from persons who are themselves in positions of authority.
3. Secure co-operative response from persons for whom there is no predetermined or expected pattern of disciplined and co-operative behavior.

E. Size of Work Group Directed

1. Direct or indirect supervision of a small group (less than 10).
2. Direct or indirect supervision of a group intermediate in size (10-50).
3. Direct or indirect supervision of a large group (over 50).

F. Social Participation

1. Primary participation within the work group, i.e. face-to-face contact, characterized by intimate and personal association.
2. Quasi-Primary or Intermediate Participation, i.e. face-to-face contact, characterized by formal association.
3. Secondary Participation, i.e. characterized by impersonal association through communication devices.

¹⁵ Interestingly, one friendship constellation of a small Vermont village which was studied by Lundberg and Lawsing centered about a physician and a barber. See George A. Lundberg and Margaret Lawsing, "The Sociography of Some Community Relations," *American Sociological Review*, 2: 318-325, June, 1937.

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G. Personal Responsibility or Social Accountability

1. Number of people who report directly and indirectly to position.

These factors will be more thoroughly described as they are utilized in the sociometric scale which follows.

II. CONSTRUCTION OF A SOCIOMETRIC SCALE TO MEASURE VOCATIONAL SOCIAL ABILITY

1. *The Social Evaluation of Jobs.* The second purpose of this study calls for a measuring instrument that will make possible a social evaluation of jobs. Such an evaluation must seek to delineate clearly the social nature of different jobs. If successful, it promises to be useful in the following ways:

1. Re-orientation of personnel and administrative policy with recognition of job analysis as social analysis. Such re-orientation might involve selection, placement, and training of workers, wage and salary administration, supervisory methods, production planning, and job methods.
2. Build a new awareness of the social responsibility of different jobs.
3. Improve vocational guidance in schools and colleges.

A. What does the job require an employee to have?

B. To what does the job subject an employee?

Each job was evaluated on the basis of an average worker performing a fair day's work.

3. *Basic Social Skills.* These factors reveal four basic social skills. These are:

A. Ability to make Vocational Social Contacts. This ability involves *social acceptance* in those social contacts which are required for successful performance on the job. Such ability may involve:

1. Contacts with working associates, customers, or general public.
2. Contacts with business class, working class, or both.
3. Contacts required or expected when "off the job."

Manifest
Social
Skills

B. Ability to direct Individuals and Work Groups. This factor involves *social leadership* or direction of others in such a way that cooperative response is obtained. Such ability may involve:

4. Direction of non-supervisory subordinates, supervisory subordinates, or persuasive and consultative direction of others.
5. Direction of individuals or groups of varying size.

C. Ability to Cooperate With Members of Work Groups. This factor requires ability to *participate* cooperatively within the work environment.

6. Participation in work groups requiring intimate association, formal association, or relative social isolation.

It is only too clear that unless the social nature of specific jobs is better understood, waste in training and placement of workers will continue to be large. Personality analysis furnishes us with some data of fairly high predictive value. Thus, in placement work we often rely heavily on our estimates of the person, yet neglect or guess about the social nature of the job. Therefore, failure often results not because an unqualified person is placed but because that person is placed on the "wrong" job; very often a job which demands social abilities not recognized by the counselor or placement officer.

2. *Factors Common to all Jobs and How they are Determined.* The seven social factors of work which have been identified are variable factors. When evaluated, they will give point values, or the relative social evaluation for each job. There are many social factors which are common to all jobs but it is believed the factors set out in this paper are the most important. They have been drawn out of a process of observation, analysis, and comparison of a large number of different kinds of work. Consideration was given at all times to the conditions drawn out by the following questions:

Latent
Social
Skill

- D. Ability to Assume Personal Responsibility for Others. This factor involves *social responsibility* or accountability. This factor requires ability to *maintain self-confidence and effective direction* of the required job functions in the presence of latent or manifest pressure of individual or group demands.
7. Job requires responsibility for (number of) persons who report directly or indirectly to position.

The identification of the significant social skills is a crucial determination for it is essential that the skills which "make" or "break" successful job performance be located. In this determination a recognition of the manifest and latent character of social skills is made. The skills that require ability to gain *social acceptance*, to *direct* others, and to *participate cooperatively* are considered manifest skills. These skills are open to direct observation. Others may (and others commonly do) judge the extent to which habits of a particular individual conform to their expectations based on their personal interpretations of the requirements of specific jobs. In other words, manifest skills are performed as overt behavior. Others are aware of their presence or absence.

Almost no scientific attention has been given to the ability to assume personal responsibility for others. As conceived here this skill is latent. Others cannot easily observe or judge the extent to which this skill is required on the job, nor can individuals be easily identified who possess it. For we are speaking here of the ability to *maintain self-confidence* and *effective direction* of the required job functions in the presence of actual or potential pressure of individual or group demands. As we examine a job which requires this skill we are concerned with such questions as: To what extent does this job require:

- A person who can take criticism,
- A person who can build resistance to the pressure of individual groups,
- A person who can maintain physical and mental health in the midst of competitive and hostile social forces,
- A person who can perform the functions of the job without seriously affecting his other social skills.

There are persons who can successfully meet the requirements of a job which call out the manifest skills if personal responsibility for others is not demanded, but fail when asked to meet this demand. Others can carry various freights of personal responsibility but have breaking points none the less.

Each of these four basic social skills have been carefully examined in order to locate measures for the evaluation of the *intensity* of the skill called out in each specific job. The search for a quantitative statement has directed the choice of indices which meet the criteria of clarity, objectivity, and ease of application. A description follows:

4. *Base Points.* Some social factors with varying minimum requirements are common to all occupations. These include willingness to work, and reasonable dress, health, and personal habits. For these characteristics a base of 100 points is allotted to each worker. The social evaluation of jobs is concerned only with characteristics above this minimum.

5. *Weighting of Social Factors.* The relative social evaluation of a job depends upon the extent to which the seven social factors are present in the requirements of the job. These factors are included in the four basic skills. These factors are each given a maximum weight of 100 except the last which is permitted a maximum weight of 400. The scale includes a possible 1000 points with 600 allocated to the manifest skills A, B, and C, and 400 to the latent skill D. This weighting was made after consultation with a general manager and a personnel director. No attempt is made here to strive for greater precision in the relative weights, for it is recognized that the factors are not completely independent and that there is overlapping.

Factors

A. Ability
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<i>Factors</i>	<i>Relative Weight</i>
A. Ability to Make Vocational Social Contacts	
1. Scope of Social Contacts	100
2. Status Range of Contacts	100
3. Social Demands "Off the Job"	100
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	300
B. Ability to Direct Individuals and Groups	
4. Social Leadership	100
5. Skill Intensity for size of Group Directed	100
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	200
C. Ability to Cooperate With Members of Work Groups	100
	<hr/>
6. Social Participation	100
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	600
D. Ability to Assume Personal Responsibility for Others	
7. Direct Responsibility for Others 25 points per person.	
Indirect Responsibility for Others 1 point per person	
	maximum equals 400
	<hr/>
	400
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Total points	1000

After the seven social factors were in final form they were pre-tested on a small group. After some revisions they were submitted to expert judges who were asked to rank the different requirements of each factor in order of the relative social skills involved. Twelve judges were selected for this task. These judges were selected on the basis of two criteria: first, their experience gave them intimate acquaintance with a wide number of jobs and, secondly, their experience gave them an appreciation of the social skills in-

involved. The list included three Personnel Directors, one College Appointments Director, one Industrial Arts Director, one Vocational Counselor, one Dean of Men, one Foreman, two Ministers, and two Sociologists. Working independently of one another, they agreed on the rank to be assigned the requirements with no factor showing less than 80 per cent agreement. The factors are described and the point values are assigned according to the rank which each requirement received.

6. *The Social Factors Described.*

A. Ability to Make Vocational Social Contacts

1. *Contacts with working associates, customers, or the general public.*

Under this factor evaluate the extent to which the work requires dealing with others and the relative social skill involved.

Point Values:

1. Job requires few or infrequent contacts with people during most of the work time.
0-25 Examples: Night watchman, many writers and research workers, forest ranger.
2. Job requires direct contact with working associates during most of the work time.
26-50 Examples: Workers on assembly line, railroad crew, office workers.
3. Job requires direct contact with customers, clients, or general public during most of the work time.
51-75 Examples: Banker, foods demonstrator, many salesmen, waitress, most physicians and teachers, many retail clerks.

4. Job requires a large number of contacts with both working associates and customers or general public during most of the work time.

76-100 Examples: College President or Dean, many managerial positions, public relations official, newspaper publisher and editor.

2. *Contacts with business class, working class, or both.*

Under this factor identify the class of people with which the job requires contact and evaluate the relative social skill involved. People may be considered belonging to the Business Class when they address their activities predominantly to *people* in the selling or promotion of things, services, and ideas. People of the Working Class may be considered as those who address their activities in getting their living primarily to *things* utilizing material tools in the making of things and the performance of services.

Point Values:

1. Job requires contact with persons of the business class during most of the work time.
0-50 Examples: Office manager, accountant, most business executives.
2. Job requires contact with persons of the working class during most of the work time.
0-50 Examples: Social worker, shop foreman, shop mechanic.
3. Job requires a number of contacts with both business and working people during the work time.

51-100 Examples: Life insurance agent, public school teacher, many county and city officials, retail clerks.

3. *Contacts required or expected when "off the job."*

Under this factor determine whether successful job performance normally demands the entertainment of customers, working associates, or influential people during "off the job" hours. Evaluate relative social skill involved.

Point Values:

1. Job requires little or no social entertainment when "off the job."
0-32 Examples: Truck driver, retail clerk, office worker.
2. Job requires entertainment of customers or influential persons when "off the job."
(Special expense account is often provided for such entertainment.)
33-66 Examples: Many salesmen, some executives.
3. Job carries expectation that working associates or influential people outside the work group will be entertained.

67-100 Examples: College President, college professor, lobbyist, most business executives.

B. Ability to Direct Individuals and Work Groups.

4. *Direction of non-supervisory subordinates, supervisory subordinates, or persuasive and consultative direction of others.*

Under this factor identify the nature of the social responsibility and evaluate the relative difficulty in managing people under different definitions of authority.

Point Values:

1. Job requires the ability to manage subordinates who have no supervisory authority but who are directly responsible to the position.
0-24 Example: Any supervisory job which has direct "line" authority over "workers."
2. Job requires the ability to manage subordinates who are supervisors themselves.
25-50 Example: Managerial positions which have direct "line" authority over supervisory subordinates.
3. Job requires the ability to persuade or guide others to buy products or follow instructions or advice when the respondents are not required to do so by any direct line of formal authority.
51-75 Example: Production planning engineer, personnel director, college teacher, salesman.
4. Job requires contacts which demand both the ability to persuade or guide others over whom the job has no formally invested authority, as well as the ability to manage supervisory or non-supervisory subordinates through the use of line authority.
76-100 Examples: Y.M.C.A. director, Boy Scout Executive, Minister of a church which has a paid staff, College President.

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5. *Responsibility for small, intermediate, or large groups of people as working associates or clients.*
Under this factor identify the size of the group managed and evaluate the relative social skill involved.

Point Values:

1. Job requires direct or indirect supervision of a small group (less than 10) of people.
0-32 Examples: Straw boss, manager of small office.
2. Job requires direct or indirect supervision of a group intermediate in size. (10-50 persons)
33-66 Examples: Foreman, teacher, lawyer.
3. Job requires direct or indirect supervision of a large group. (over 50)
67-100 Examples: Plant superintendent, college president, college teacher, physician, dentist, minister, corporation president.

C. Ability to Cooperate with Members of Work Groups.

6. *Participation in work groups requiring intimate association, or formal association.*

Under this factor identify the kind of social participation in work group which the job demands, and evaluate the relative social skill involved in the attainment of joint action.

Point Values:

1. Job requires relatively few social contacts of any kind during the work time.
0-19 Examples: Night watchman, janitor, writer.
2. Job requires intimate and personal association in daily face to face contact.
20-39 Examples: Railroad crew, workers in office and shop.
3. Job requires formal association within a large group with minimum of face to face contact but with greater use of letters, telephone, telegram, and memoranda.
40-59 Examples: Jobs requiring a high degree of technical or administrative planning and organizing, such as production planning executive, methods engineering superintendent, some office managers.
4. Job requires formal association in daily face to face contact.
60-79 Examples: Policy making and educational functions such as executives whose work load involves a large amount of conference. This requirement is a large part of the work of teachers, physicians, lawyers, and dentists.
5. Job requires a large amount of formal association both in face to face contact and also through the use of communication devices.
80-100 Examples: College president, many business executives, Y.M.C.A. and Y.W.C.A. directors.

D. Ability to Assume Personal Responsibility for Others.

7. *Personal responsibility for people who report directly or indirectly to position.*

Under this factor identify the number of persons reporting directly or indirectly to position.

Point Values:

- 25/per person 1. Job requires responsibility for (number of) persons who report directly to position.
- 1/per person 2. Job requires responsibility for (number of) persons who report indirectly to position.

Formal tests of the reliability and validity of the scale have been postponed until extensive study of its strength and weaknesses have been revealed by applications. This is an exploratory study. This scale, which purports to make a social measurement of jobs, may be likened to those first efforts which were made to effect job evaluation. If social measurement of jobs is feasible and useful, there is much work yet to be done in building more precise scales. We shall be satisfied at this stage if the instrument can be widely

applied to work situations and will reveal more clearly the essential social requirements of such situations. Our efforts are directed here to a demonstration of the discriminatory power of the present scale when applied to the job structure of a small industrial company.

III. A SOCIAL EVALUATION OF JOBS IN A SMALL INDUSTRIAL COMPANY

The industrial company which was chosen for application of the scale employs 180

persons. It will be referred to as the Midwestern Compressor Company. This company carries an office force of approximately 25 employees and a factory force of about 155. It is engaged in the manufacture of air compressors and power take-offs.

Before applying the scale, the researcher observed the work behavior of all employees in the company. This was done to assure that proper application of each social factor would be made when the jobs were evaluated. The cooperation of the General Manager was solicited to make the ratings because of his intimate knowledge of the job structure. After training in the meaning of the scale and the application of each factor, the General Manager was then asked to assign the proper weights to the relative social skill involved in each job. The researcher checked to see that the proper interpretation of the scale was made while the General Manager made the evaluation factor by factor. All evaluations were referred to the jobs themselves and *not* to the individual currently filling them.¹⁶

The social evaluation of jobs in the Midwestern Compressor Company is shown in Chart 1. Here the total social skill points of each job have been plotted in the upper curve. The lower curve shows the social skill attributable to the three manifest skills: Ability to Make Vocational-Social Contacts, Ability to Direct Individuals and Groups, and Ability to Participate Cooperatively. The difference between the upper and lower curve is a representation of the evaluated latent skill, The Ability to Assume Personal Responsibility.

The chart clearly shows that the greatest social skill is required by the General Manager, while the least is required of the Fireman. The social worlds of these two jobs are vastly different. The General Manager lives in an office which averages five to ten telephone calls an hour. Conferences are many. The scope of contacts include salesmen, government officials, customers, community

leaders, plant and office officials, and sometimes workmen. Letters must be read and others written. Visiting customers and government officials must be entertained. Business trips must be arranged. Meanwhile 14 positions report directly to the General Manager and indirectly the responsibility of 151 other persons are on his shoulders. In diametric contrast to this large range of frequent contact and responsibility, the night fireman maintains a solitary vigil at the furnaces. He sees no one except the night watchman who stops occasionally during his rounds to exchange gossip. He eats his lunch alone. He has no responsibility for others on his job. Between these two poles, the General Manager and the Night Firemen, rests the job structure with its varying options of association and responsibility.

The range and intensity of the manifest skills required in the jobs of the company follow the rough outline of the growth curve. Approximately 160 workers are represented in the low tail of the curve within the area of non-supervisory jobs. The social skill demanded of the great bulk of workers is relatively low. The social skill required in a few of the jobs is relatively great. Perhaps, the monotony of industrial jobs might be examined in this light. It may well be that it is not so much the presence of repetitive mechanical operations which is reducing the creative elements of so many industrial jobs, but the dearth of opportunities for stimulating and meaningful social contact.¹⁷

The contrast between those who carry responsibility for others and those who do not is shown in Chart 1. Jobs which make relatively high demands for social skills also require assuming responsibility for others. This means that the jobs with high social demands require individuals who cannot only handle people but who must also be *responsible* for people.¹⁸ It has been indi-

¹⁷ See Elton Mays and George Lombard, *Teamwork and Labor Turnover in the Aircraft Industry of Southern California*, Cambridge, Massachusetts, 1944.

¹⁸ The relationship between social skill and social responsibility shown in this Company does not

¹⁶ The author is indebted to Mr. S. V. Saginor, General Manager of "Midwestern" Compressor Company.

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cated elsewhere that this makes a dual demand on the nervous system. Satisfactory overt skills must be forthcoming as well as nervous strength to carry responsibility. In

this kind of description reveal more clearly the nature of the demands in the job and the kind of individual who is needed to perform satisfactorily on the job.

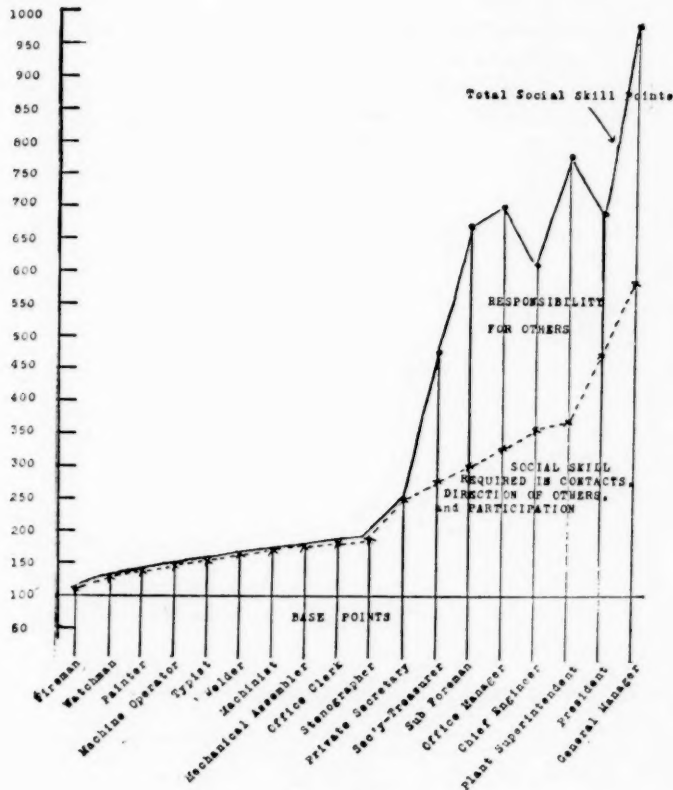


CHART I.
Social evaluation of key jobs—Midwestern Compressor Co.

the chart, the responsibility for others is regarded as a superstructure which lets a weight down upon the individual who must keep performing his daily contacts beneath it. Some individuals wear this weight lightly and well; others stagger irritably under it. For our purposes here it is desirable that

demonstrate a principle. It is possible for social skill and social responsibility to be uncorrelated. This is particularly true in highly authoritarian structures. In such instances authority may stand in lieu of social skill yet responsibility for others may be very great. This is not uncommon in military organization.

IV. SOCIOMETRIC PROFILES OF SELECTED JOBS

The final purpose of this study is to study the social demands of selected jobs, through the use of sociometric profiles. The sociometric profile is an adaptation of the widely used psychological profile. The psychological profile is a chart which shows a *person's* place in a group on several different appraisals. The sociometric profiles used in this study show a *job*, set in the job structure of this small industrial company, and compared on several different social factors that are considered important and somewhat

independent. The profile chart is made by laying off on a graph paper a line which represents the mean of a group and other parallel lines which represent units of dispersion such as standard scores. Chart 2 is a sociometric profile chart on which have been plotted the ratings of three managerial jobs in the Midwestern Compressor Company. The ratings of each job on all seven factors which make up the sociometric scale are shown in standard scores as expressed in T scores using McCall's well-known T-Scale.¹⁹ The McCall scale assumes a distribution ranging from -5σ to +5σ. Each sigma unit is subdivided into ten parts of .1σ each so

scribed in the previous section. The President has to meet a wide scope of contacts but his status range is small since his contacts are usually with the business class only. In this company the President is also the Vice-President of two other industrial enterprises and divides his time between three interests. He carries direct responsibility for only five men who report to him in the Midwestern Compressor Company. Only in the social demands "off the job" are requirements greater than for the General Manager. The Plant Superintendent services a limited scope and range of contacts for he does not meet customers, salesmen, or government officials.

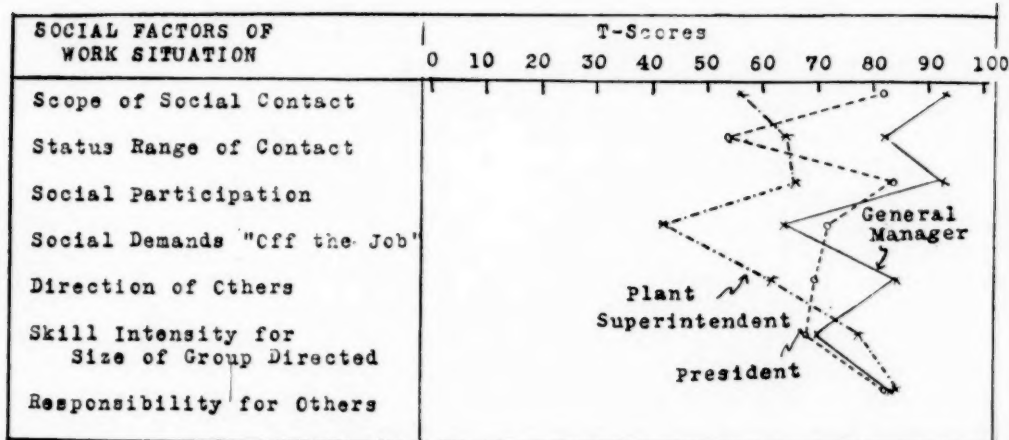


CHART 2.
Sociometric profiles of three managerial jobs

that the total scale has 100 points in all. This means that a score of 60 on any factor is 1σ above the mean and therefore comparable in standard units. Chart 2 shows that the General Manager requires the greatest social skill. The scope and status range of contacts required in this job are great as was de-

¹⁹ See E. F. Lindquist, *A First Course in Statistics*, New York, 1938, p. 133-134. The formula for T Scores is $T = \frac{10(X-M)}{S.D.} + 50$ where X is a particular raw score in a given distribution and M and S.D. the mean and standard deviation, respectively, of the distribution.

His job is to supervise eleven sub-foremen and maintain good labor relations with the 155 men on the factory floor. He stands on equal terms with the General Manager in assuming the largest weight of responsibility for others. A high degree of skill is required in directing his group although he is greatly aided in having line authority to back all of his contacts. He hires and fires. He is the "boss" in the factory. For this reason his job requires less versatility than that of the President and General Manager, both of whom must be successful in situations where they carry no formal authority such as in contacts with potential customers and gov-

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ernment officials. The plant superintendent has relatively light requirements in "off the job" activities. He is expected to entertain his foremen occasionally and also on occasion to accompany the General Manager and President at lunch or dinner in the entertainment of customers or influential persons.

Chart 3 focuses attention on three job titles held by 93 men. These are the jobs of Mechanical Assembler, Machinist, and Ma-

effort is not wasted. These men must be able to get along with one another. Any person who disrupts good job relations hinders the efficiency of the group. Each person must be versatile. Changing work assignments require new group arrangements. New men are brought in and former members may leave, yet new work teams must form quickly to complete the task assigned. The plant operates on a profit-sharing plan and the men themselves are often resentful of any mem-

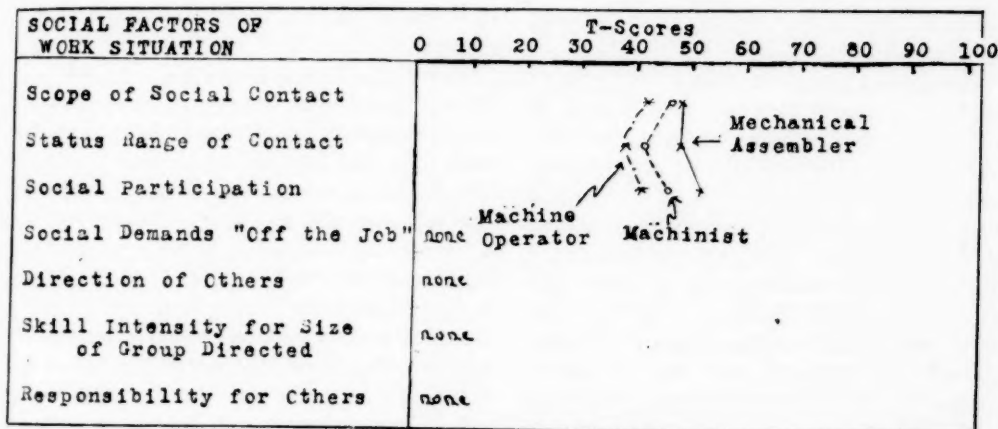


CHART 3.
Sociometric profiles of three factory jobs

chine Operator. They are jobs which carry similar social demands yet the differences between them are great enough as to require careful placement of the men. The Superintendent and General Manager have both attested to the importance of team work in the tasks required of the mechanical assembler. One of the current jobs on which the mechanical assemblers are engaged is the assembly of portable machine shops. This work requires that teams of five to seven men work in and around a large truck assembling equipment which requires mechanical and electrical manipulation. These men must work in all kinds of work positions in proximity to one another. There must be almost automatic synchronization of function so that the work of each may supplement the work of the other in order that time and

bers who jeopardize their earnings through lack of cooperation and efficient workmanship.

The machinists work on machine tools such as lathe, grinder, and boring mills. They work in a more fixed position since their work is tied to a stationary machine. However, their work requires them to move about the machine shop as they are assigned to different machining operations. They must be able to work around other machinists and machine operators. Thus, they must be able to get along with all the men in the machine shop.

The machine operator is assigned to one machine only. He has a stationary position and is not moved about the machine shop. His job therefore makes a lighter requirement for social acceptance and participation.

CONCLUSION

There have been five major approaches to the sociological study of work groups and their influence on personality. These are:

1. The Factory as a Social System
2. The Study of Specific Occupations
3. The Social Psychology of Occupations
4. The Study of Interpersonal Relations in Work Groups
5. Business as a Social Institution

From these five directions there is emerging a body of data and theory that awaits synthesis. The dim outlines of Industrial Sociology can be foreseen.

The general purpose of this paper has been to initiate research into the social nature of jobs and to find common social factors that underlie and characterize all occupations. It is possible to find such social factors and to measure the relative social skills required in different jobs. This possibility poses a challenge. That challenge is to widen and improve the social analysis of jobs so that the education and training of potential workers will be improved and the subsequent placement of workers will be more successful in the difficult process of matching men with jobs. Sociology has a stake in this problem and the stakes are high. The productivity of the worker, the pitch of labor relations, and the happiness of the individual depend partly on ability to train and place the worker more satisfactorily. Moreover, the knowledge necessary to reconstruct work situations and build meaning and purpose amidst the demands for repetitive and standardized job performance await new discoveries in the social organization of work situations. Old answers are not sufficient. Roethlisberger and Dickson show in the famed Hawthorne Plant Study that there was no direct relation between performance in the Bank Writing Observation Room and capacity to perform as measured by dexterity or intelligence tests. The lowest producer ranked first in intelligence and third in the weighted soldering scores. The man who scored highest on the soldering test ranked seventh in output.²⁰

²⁰ Roethlisberger and Dickson, *op. cit.*, p. 443-445.

The social factors of the work situation offer new clues in the understanding of worker morale and productivity. The *social evaluation of jobs* thrusts into bold relief the social requirements and responsibilities residual in the job. This emphasis is important in a culture which plays up technical know-how and screens out the social nature of jobs behind status and technical denotation. The *sociometric profile* is an analytical tool which permits examination of the comparative social skills of a given job and provides estimates of the skill intensity which is demanded.²¹

This intensive examination of the job "leaves out" the dynamic interrelations which are set into motion as workers perform their jobs and interact with other workers. The social nature of this group phenomena is being gradually revealed by Mayo, Roethlisberger, Whitehead, Moreno, Gardner, Warner, Lombard, Moore, and others. There is an intimate connection between the work situation and the interpersonal relations of workers. The *work situation* defines the characteristics and sets the limits of the social participation. A next step forward is a clarification of the *role* which must be played in specific work situations as defined by the individuals who compose the work groups. An advance of this order would promise the possibility of predicting with high accuracy the success or failure of an individual worker in advance of placement. In this way the social and economic waste of absenteeism and turnover, and the personal traumas of job failure might be increasingly reduced.

²¹ For an excellent discussion of the challenge to sociology to develop knowledge about and techniques of training for social skill see Elton Mayo, *The Social Problems of an Industrial Civilization*, Cambridge, Mass., 1945, pp. 19-23. Cf. "The fact that the United States has developed a successful series of tests for technical skills does not provide any extenuation for psychology. Within its narrow limits, this is useful and, indeed excellent. But the general effect is to concentrate attention on technical problems and to blind us to the importance of the problems of human cooperation-social skill. This blindness has unquestionably contributed to the advent of calamity."

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SKIN COLOR VALUES IN THREE ALL-NEGRO SCHOOL CLASSES*

MELVIN SEEMAN
Ohio State University

RECENT studies of the American Negro have stressed the significance of the value pattern in which lightness of skin is a desideratum. The widespread and penetrating character of the color influence is suggested by Myrdal's comment that "cliques, clubs and social life in general seem to be permeated by this color preference."¹

The majority of these studies, however, have been done with adolescents or adults, and we thus get only a *recall* of the meaning of skin color in earlier childhood, a recall overlaid, no doubt, with the rationalizations and frustrations of the intervening years. The work reported here focuses upon skin color discriminations as they operate in exclusively Negro child groupings. It presents direct evidence regarding the importance of skin color to the pre-adolescent Negro, and thus furnishes insights into the operation of child value systems.

Standard sociometric and interview techniques were used to explore the following hypotheses: first, that children in all-Negro grade school classes have incorporated into their value system the color preferences of the adult Negro community²; and second, that skin color is operative as a socially differentiating factor at this age level.

* Paper delivered at annual meetings of the American Sociological Society, Cleveland, March, 1946.

¹ G. Myrdal, *An American Dilemma*, New York, 1944, p. 698. For intensive analyses of the color influence, see especially the volumes prepared under the auspices of the American Youth Commission by Charles S. Johnson, W. Lloyd Warner, E. Franklin Frazier, and Allison Davis and John Dollard.

² No attempt was made to investigate adult color values. The writer assumed that the adult patterns in the communities studied were comparable to those reported in the works cited in footnote 1. The writer would like to express here his thanks to Dr. Lloyd A. Cook for many helpful suggestions in the conduct of this investigation, and to Dr. Paul Hatt for editorial assistance.

A total of 81 children in three all-Negro classes were tested. Two of the classes (X and Y) were combined 3rd and 4th grades, while the third (Class Z) was a combined 5th and 6th grade group, in the same school as Class Y. Table 1 contains a breakdown

TABLE 1. TOTAL SAMPLE, BY SEX AND COLOR CATEGORIES, WITH TOTAL FRIENDSHIP CHOICES AND REPUTATIONAL MENTIONS, BY SCHOOL CLASS

	Class X	Class Y	Class Z
Pupils by Color Groups			
Very light brown.....	2	3	0
Light brown.....	12	2	1
Brown.....	3	11	12
Dark brown.....	5	12	10
Very dark brown.....	1	3	4
Pupils by Sex			
Boys.....	12	14	11
Girls.....	11	17	16
Total Pupils.....	23	31	27
Total Number of Friendship Choices.....			
	726	504	561
Total Number of Reputational Mentions.....			
	880	503	570

of this sample by sex and color categories. It reveals a fairly even sex ratio in the three classes; and a rather close correspondence, within each class, between the number of friendship choices made and the number of reputational mentions. The distribution in the color categories reflects a situation similar to that reported by Warner for Chicago; namely, that dark-skinned Negroes are found in greater proportion in the lower social class groups.³

Color ratings were made for each child on the following scale: 1—very dark brown;

³ Cf. W. Lloyd Warner, et al., *Color and Human Nature*, Washington, D.C., 1941. No attempt was made to stratify these children rigorously; but data on parental occupations and education were available. Classes Y and Z represent lower class groups in comparison with Class X.

2—dark brown; 3—brown; 4—light brown; and 5—very light brown.⁴ Three independent ratings were made in two of the school classes, using Negro and white raters in both classes. In Class X, the correlations among the three raters were $+.94$, $+.91$, and $+.84$; and in Class Z, $+.79$, $+.78$, and $+.76$. These correlations indicate a very acceptable reliability in color ratings, with somewhat less satisfactory results obtained in Class Z.⁵

EXPRESSION OF COLOR VALUES

Four types of evidence regarding lightness or darkness of skin as value criteria were

responses were recorded to the question, "What skin color do you prefer?"

An inspectional comparison of the self and adult ratings strongly suggests that the children's ratings of themselves are skewed toward the lighter colors, usually one step in the color scale. An analysis for statistical significance of this distortion revealed that the difference in ratings for Class Y was significant at the .05 level of chance; and for Class Z, at the .01 level of chance.⁶ Thus, there is a significant tendency on the part of these children to rate themselves lighter than objective adult ratings justify.

Every child in Class X was interviewed

TABLE 2. RESPONSES TO 10 ALTERNATIVES IN A "THREE WISHES" TEST, SHOWING FREQUENCY OF FIRST, SECOND, AND THIRD CHOICES

School Class	Stronger			Better liked			Get along better with parent			Smarter			Lighter skin			Play games better			Bigger			More money			Better looking hair			One very good friend		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
X	2	3	3	1	3	0	1	1	1	4	2	4	1	0	2	0	1	6	2	3	1	4	6	2	1	1	3	7	3	1
Y	13	1	0	4	5	3	1	2	1	4	7	0	0	1	0	0	2	1	0	1	3	1	1	3	1	1	6	0	3	7
Z	12	2	3	1	1	0	2	2	0	1	9	1	0	0	2	0	0	0	1	3	5	1	2	3	1	2	0	2	0	7
Sub-total	27	6	6	6	9	3	4	5	2	9	18	5	1	1	4	0	3	7	3	7	9	6	9	8	3	4	9	9	6	15
Totals by wishes	39			18			11			31			6			10			19			23			16			30		

gathered: first, self-ratings were made by two classes, using the same color scale as the adult raters; second, motivations for friendship choice were determined through interviews; third, a "Three Wishes" test was designed to bring out the relative desirability of lightness of skin through 10 such statements as, "I would like to be stronger than I am now," or "I would like to have lighter skin than I have now," etc.; fourth, verbatim

to determine whether color preference was expressed as a motivation for friendship choice or rejection. No mention of skin color was made by the investigator until the close of the interview, when a direct question was asked regarding the importance of "looks" in choosing friends. A summary of these data reveals the *almost complete absence of skin color as a verbalized motivation*. Only one child mentioned lightness of skin as a factor in choosing. The bulk of the reasons given centered around compatibility in play, school behavior, and general cooperativeness. The direct question concerning "looks" brought recognition of skin color as a possible factor

⁴ For a similar classification arrived at through a numerical scaling technique, of C. H. Parrish, *The Significance of Color in the Negro Community*, unpublished Ph.D. dissertation, University of Chicago, 1944.

⁵ Class Y was rated by the writer alone. The smaller range of skin color difference in Class Z may account for the less satisfactory correlations.

⁶ The formula used here is found in G. W. Snedecor, *Statistical Methods*, Iowa, 1938, p. 53.

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in choice of friends from three children; but the remainder rejected skin color as a criterion.

The results of the "Three Wishes" test⁷ are presented in Table 2. Each child was permitted to indicate a first, second, and third choice from among the ten wishes listed; and the frequency of mention for each wish at each level of preference is indicated in Table 2. It is clear that these children, faced with the ten alternatives given, show relatively little desire for lighter skin and somewhat greater desire for better hair. The greatest desirability, however, attaches to those values (e.g. "smarter," and "stronger") which are of more immediate behavioral meaning in the child's world.

Finally, the children in Class X were asked, "What skin color do you prefer?" Space limitations preclude a verbatim report of the answers given, but a large number of the responses were similar to the following: "I'd like to be the color of my uncle, because he's lighter than my family"; or "David's color, because he's light"; and "My own color; it's almost the color I like, not too dark or too light, but smooth." Taken as a whole, these responses indicate a clear pattern of preference for light skin.

SKIN COLOR AND SOCIAL STATUS

Two measures of the operational importance of skin color differences were used, friendship choice and reputation in the group. The former was measured through the Ohio Social Acceptance Scale,⁸ which requires each child to rate every other child in his class as follows: 1—"My very, very best friends"; 2—"My other friends"; 3—"Not friends, but okay"; 4—"Don't know

them"; 5—"Don't care for them"; and 6—"Dislike them." The choices made through this scale were kept anonymous to the child, but a coding system permitted the investigator to know what ratings were given by each child. A re-test of Class X one week after the initial test produced a correlation of $+ .90$.

The analysis of variance technique was employed to determine whether significant differences in friendship choice status (social acceptance) existed among the several color groups within each of the three classes. For the purpose of this analysis, the null hypothesis was postulated; namely, that no significant differences existed among the color groups (i.e. that all of the color groups were a homogeneous population with respect to friendship choice). The obtained ratios⁹ from this analysis indicated that there were significant differences at the .01 level of chance among the color groups in Class X and Class Y. No significant differences were found in Class Z. The writer tentatively concludes, therefore, that the skin color of the person being rated makes a difference in two of the school classes, while no such difference is evident in Class Z.

For the purpose of further analysis of these differences, mean social acceptance scores were computed for every color group in each class. The results are given in Table 3. It should be noted that since the computation of scores was based upon the numbers

⁹ The analysis of variance technique is essentially a comparison of the variability *within* groups with the variability *between* groups to determine whether the between groups' variance may be attributed to chance variation. It is customary to *reject* the null hypothesis if the obtained ratio is significant at the .01 level; to hold the null hypothesis *in doubt* if the ratio is significant between .01 and .05; and to *accept* the null hypothesis if the ratio is above the .05 level of significance. For the purposes of this study, the .01 level of significance is viewed, therefore, as the only level justifying the conclusion that critical differences exist without question. For a similar use of the "F" ratio and its corollary levels of significance, cf. P. O. Johnson and F. Tsao, "Factorial Design and Covariance in the Study of Individual Educational Development," *Psychometrika*, 10:133-162, 1945.

⁷ The items on this test owe much to the "Test of Personality Adjustment," constructed and validated by Carl Rogers. Cf. his *Measuring Personality Adjustment in Children Nine to Thirteen Years of Age*, New York, Teachers College Contributions to Education, #458, 1931.

⁸ This scale was developed under the guidance of Dr. Louis Rath and has been used in many schools throughout the state of Ohio. The writer is indebted to Dr. Rath for helpful suggestions regarding its use.

TABLE 3. MEAN SCORES IN SOCIAL ACCEPTANCE, BY SKIN COLOR, FOR THREE ALL-NEGRO SCHOOL CLASSES

School Class	Very light brown	Light brown	Brown	Dark brown	Very dark brown
X	2.95	2.53	3.06	3.55	*
Y	2.29	2.33	2.50	3.25	2.97
Z	**	**	2.85	3.02	2.73

* No data since only one child was classified as "very dark brown."

** No data since no children were rated "very light brown," and only one child as "light brown."

1-6 of the Ohio Social Acceptance Scale (in which 1 is most acceptable and 6 least acceptable), a low mean social acceptance score is indicative of greater acceptability.

Table 3 reveals at a glance that the "light brown" and "very light brown" color groups, in classes X and Y, have a higher acceptability than that of the other color groups. The table reveals, also, that there is a rather consistent decline in acceptability as we move from the lighter to the darker groups. This is most evident in Class Y, where there is a steady decline in acceptability, with the

slight reversal for the "very dark brown" color group.

These observations are supplemented and sharpened by the results given in Table 4. Fisher's technique for small sample analysis¹⁰ was used to compare each social acceptance mean with every other mean in the same school class to determine the color groups between which statistically significant differences exist.

In Class X, the "light brown"- "dark brown" comparison is the only difference which is significant at the .01 level of chance. In Class Y, four color group comparisons are significant: "very light brown"- "dark brown"; "very light brown"- "very dark brown"; "light brown"- "dark brown"; and "brown"- "dark brown." Thus, there are significant differences which consistently point to the greater acceptability of the lighter color groups.

The second measure of the behavioral importance of skin color discriminations was reputation in the group. Reputations were derived through the Ohio Recognition

¹⁰ Cf. G. W. Snedecor, *op. cit.*

TABLE 4. DIFFERENCES IN MEAN SOCIAL ACCEPTANCE, CRITICAL RATIOS, AND LEVELS OF SIGNIFICANCE, BY SKIN COLOR, THREE SCHOOL CLASSES

Color Comparison	Class X			Class Y		
	Difference between means	Critical Ratio	Significance Level	Difference between means	Critical Ratio	Significance Level
Very light brown						
Light brown.....	.42	1.64	N.S.*	.04	1.43	N.S.
Brown.....	.11	.36	N.S.	.21	1.08	N.S.
Dark brown.....	.60	2.19	.05	.96	5.00	.01
Very dark brown.....	**			.68	2.76	.01
Light brown						
Brown.....	.53	2.45	.05	.17	.73	N.S.
Dark brown.....	1.02	6.03	.01	.92	3.98	.01
Very dark brown.....	**			.64	2.30	.05
Brown						
Dark brown.....	.49	2.08	.05	.75	6.00	.01
Very dark brown.....	**			.47	2.37	.05
Dark brown						
Very dark brown.....	**			.28	1.42	N.S.

* Not significant at the .05 or .01 level of chance.

** No data in the "very dark brown" category since only one child was classified in this category, and was included in the "dark brown" group.

Scale,¹¹ bers of graphs. (e.g. "A who are play?" "Are the always t

TABLE 5.

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Scale,¹¹ which asks each child to match members of his group with 18 descriptive paragraphs. Nine of these items are favorable (e.g. "Are there any children in our room who are very, very good in the games we play?"); and nine are unfavorable (e.g. "Are there boys and girls in our room who always think of themselves first?").

significant differences in friendship were found, no corresponding reputational differences were discovered.

The precise character of the differences in skin color ratings is revealed in Table 5. In both school classes, those favorable items which show significant skin color difference are being disproportionately

TABLE 5. MEAN SKIN COLOR RATINGS, DIFFERENCES AMONG MEANS, AND LEVELS OF SIGNIFICANCE, FOR 18 REPUTATIONAL ITEMS, TWO ALL-NEGRO SCHOOL CLASSES

Item No.	Class X				Class Y			
	Mean skin color	Difference*	Critical Ratio	Significance Level	Mean skin color	Difference*	Critical Ratio	Significance Level
1**	2.87	-.47	3.671	.01	2.70	-.22	1.606	N.S.
2	3.71	+.37	2.984	.01	2.98	+.06	.043	N.S.
3	3.12	-.22	1.642	N.S.	2.54	-.38	2.032	N.S.
4	3.41	+.07	.593	N.S.	3.13	+.21	1.438	N.S.
5	2.82	-.52	3.852	.01	2.12	-.80	3.556	.01
6	3.39	+.05	.382	N.S.	3.40	+.48	1.992	N.S.
7	3.08	-.26	2.149	.05	2.48	-.44	2.683	.05
8	3.49	+.15	1.250	N.S.	3.48	+.56	3.522	.01
9	3.53	+.19	1.557	N.S.	2.32	-.60	3.061	.01
10	3.61	+.27	2.477	.05	3.84	+.92	6.216	.01
11	2.92	-.42	2.979	.01	2.70	-.22	.733	N.S.
12	3.67	+.33	2.481	.05	3.46	+.54	2.888	.01
13	3.42	+.08	.625	N.S.	2.40	-.52	2.708	.05
14	3.71	+.37	3.627	.01	3.08	+.16	1.067	N.S.
15	2.73	-.61	4.729	.01	2.54	-.38	2.197	.05
16	3.66	+.32	2.712	.01	3.57	+.65	2.600	.05
17	2.63	-.71	5.504	.01	2.31	-.61	3.588	.01
18	3.65	+.31	2.870	.01	3.00	+.08	.503	N.S.

* Differences are taken from the grand mean in each school class. For Class X this mean was 3.34; and for Class Y, 2.92.

** Odd-numbered items are undesirable reputations, and even-numbered items are favorable reputations.

To determine whether unfavorable reputations were directed toward the darker skin color groups, a mean skin color rating for each of the 18 reputational items was computed, and an analysis of variance made for each of the three classes. Significant differences in skin color rating were found in Class X and Class Y; no significant differences existed in Class Z. It is important to note that these findings parallel the findings in the matter of friendship choice: where no

directed toward the lighter children (*i.e.* the significant difference is in the direction of a lighter mean skin color rating); and those items which are unfavorable are directed toward the darker children. There is, however, no indiscriminate assignment of favorable or unfavorable reputations by skin color. This is borne out, for example, by the fact that in Class X, six reputational items show no significant differences by skin color. Only two items show significant differences in both school classes. For both school classes, however, there is a consistent rise and fall of skin color rating as we move from

¹¹ This scale and the Ohio Social Acceptance Scale have been published by the Bureau of Educational Research of the Ohio State University.

favorable to unfavorable items (all even-numbered items being favorable reputations). For Class X, one-half of the items show color differences which are significant; while in Class Y, one-third show significant differences.

INTERPRETATION

The evidence presented here supports the hypotheses elaborated in a previous section. Third and fourth grade Negro children, in a uniracial group context, reveal clearly their commitment to the superior value of light skin; and skin color differences are associated with differences in friendship and reputational status. No attempt will be made here to summarize this evidence; but several theoretical implications of the data must be explored.

Two aspects of our findings are most striking. First, though favorable friendship choice is significantly associated with lightness of skin, these children do not verbalize skin color preference as a basis for choice. The writer's hypothesis is that color values, like many other social norms, become established quite early as a basic frame of reference for the child; but it is not suggested that the color frame of reference which channelizes choice need be a matter of conscious awareness on the part of the child. Sherif's experiments in the establishment of social norms suggest that these norms may be developed without the subject's awareness of their operation.¹²

Further, it is the writer's suggestion that the skin color frame of reference operates as a "heteronomous" social norm; it is a norm imposed upon the child from without, a norm which is not "interiorized" at this age level.¹³ It is, therefore, not verbalized as a motivation because it bears no immediate relation to the pursuits and tasks of the child. Thus, to the grade school Negro child, skin color is less important *per se* than, for example,

whether the person chosen is good in games, or refrains from "tattling," etc.; while the adolescent Negro, emerging into a period of competition for occupations and for dates, as well as impending marriage, may exhibit in his choices and rejections a concern more directly related to the important skin color criterion. Our position is that color values may serve as a frame of reference for friendship choice long before these values become associated with the developmental tasks of the child, or with the conscious status striving which involves color. The failure to verbalize color values as a basis for choice may thus be a function, not of inhibition, but of the fact that the values in question are not an integral part of the child's age-level culture.¹⁴

This theoretical position is based upon several factors: first, the verbatim responses suggest no hesitation on the part of the child in expressing preferences for light skin color. Second, during the interviews, the subjects gave no evidence of inhibition on the score of color. Third, there has been little direct study of child inhibitions of color distinctions, the evidence on this point coming largely from the recall of childhood experience by adults. The inhibitions attendant upon the expression of color distinctions *during these more mature periods* may significantly distort accurate recall.

A second important aspect of our results requires comment; namely, the absence of significant choice differences in Class Z. This class, being in the same school as Class Y, is presumed to have been exposed to roughly the same value patterns. It may be that the difference between the classes is due to the fact that Class Z is composed of older children;¹⁵ but a preliminary analysis of data from another (bi-racial) 5th-6th grade class indicates significant color differences exist at this age level. It is especially to be noted that Class Z exhibited a narrow range

¹² M. Sherif, *The Psychology of Social Norms*, New York, 1936.

¹³ For an exposition of the relation of Piaget's concepts of heteronomous and autonomous morality to social norms, cf. M. Sherif, *op. cit.*, pp. 180-181.

¹⁴ Cf. C. H. Parrish, *op. cit.* for a view which stresses the importance of inhibitory tendencies.

¹⁵ Cf. J. H. Criswell, *A Sociometric Study of Race Cleavage in the Classroom*, Archives of Psychology, #235, 1939.

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of color differences: no child in this group received a color rating of "very light brown," and only one child rated as "light brown." The writer suggests that the absence of significant differences in Class Z is a function of the fact that the frame of reference with respect to color is being constantly recreated in terms of the specific situation in which the individual is involved. Thus, it is held that the children in Class Z choose differently because their color values, being variable under the specific impact of the choice situation, are functionally different.

This point of view emphasizes the fact that values must not be viewed as fixed reference points for the individual; but that rather, social norms operate as contextual variables.

This implies that the limitation within which the present study was conceived—i.e. that the classes be all-Negro in composition—bears a fundamental relationship to the results obtained. It further implies that studies of both intra-racial and inter-racial choice must be viewed as presenting choice situations in which the valuational frames of reference created are distinctively different.

THE SOCIOLOGISTS' PART IN PLANNING THE COLUMBIA BASIN*

CARL C. TAYLOR

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THE Columbia Basin Irrigation Project embraces two and a half million acres in south central Washington, about one-half of which are suitable for irrigation farming. Most of the land now under cultivation is in large dry land wheat farms. The present population of the area is slightly more than 11,000 (not including those who moved into the area as war industry workers), of which approximately 7,000 live in 9 incorporated towns. The farm population of the area is not more than 4,000.

It is estimated that the population of the area when it is completely settled will be well over 300,000, somewhere from 50,000 to 75,000 located on farms, the remainder in towns and cities. Not less than 10,000 new farms will be created. A number of new towns will appear and one or two moderately large cities will develop. Churches, schools, and recreation centers as well as trade centers and commercial agencies will be established to serve the new settlers. This development will take place whether or not there is any further economic and social planning than that required to bring irrigation water from

the Grand Coulee Dam to the land.

The basic physical problems in converting the area from its present to future development are those of irrigation, land use, transportation, and domestic water supply. The basic economic problems are those of farming and other business enterprises, marketing, costs, and financing. The basic social problems are those having to do with the amount and composition of population to be served, the development, location and organization of social services, and the level of living of the settlers.

Needless to say, it is clearly recognized that the physical problems have economic aspects, the economic problems have social aspects and even that the physical problems cannot be solved without giving consideration to social facts and consequences. But in planning it was recognized that a considerable degree of isolation of specific problems was a requisite to the detailed investigation essential to sound analysis. This isolation was accomplished by listing 28 problems for investigation and assigning each to a group of experts for study and report. To understand the relation of social planning to all other factors it is necessary to know something about what others were assigned to do.

* Paper read before Community and Ecology Section of the American Sociological Society Meetings, Cleveland, Ohio, March 1, 1946.

From 3 to 22 experts were assigned to each of the following problems:*

- Problem No. 1:* What types of farm economy have been successful, which types unsuccessful on other Northwestern irrigation projects?
- Problem No. 2:* What types of farm economy are best suited to this project area, in view of soils, climate, topography, freight costs, etc.?
- Problem No. 3:* What practicable and equitable means, if any, may be used to insure proper land use?
- Problem No. 4:* What are the normal water requirements for the crop and land use programs recommended?
- Problem No. 5:* What is the most practicable way of preventing excessive use of water?
- Problem No. 6:* What is the optimum size of farm for the types of farm economy recommended?
- Problem No. 7:* What portion of the area, if any, should be planned for small farms to accommodate farm laborers and part-time farmers?
- Problem No. 8:* To delimit the sections within which farms will be laid out.
- Problem No. 9:* What feasible means could be adopted or created to help insure an adequate level of living and minimize financial commitments of needy settlers?
- Problem No. 10:* What advantages and disadvantages, if any, in farm lay-out and farm work might result from concentration of settlers in small communities or nuclear hamlets?
- Problem No. 11:* Should power projects downstream, Columbia River navigation, flood control, and general social benefits be assigned an equitable share of the costs of Coulee Dam?
- Problem No. 12:* How secure, equitable payments toward the cost of primary irrigation works from nonrural settlers?
- Problem No. 13:* Is it desirable and practicable to assign different payment charges against the different classes of land?
- Problem No. 14:* How finance needy settlers?
- Problem No. 15:* What methods exist or could

be developed to control privately owned lands?

Problem No. 16: How control state, county and railroad lands?

Problem No. 17: To estimate the annual rate at which lands should be brought in during the first few years?

Problem No. 18: To determine the optimum number of new villages and formulate plans for the orderly development of cities and villages.

Problem No. 19: To plan desirable additions to and modifications of the road net.

Problem No. 20: To plan desirable additions to railroad facilities.

Problem No. 21: What is the possible significance to the project area of the Columbia River as a commercial route?

Problem No. 22: What are the essential facts with respect to the occurrence, movement, quantities and qualities of underground waters throughout the project areas?

Problem No. 23: To plan the facilities needed to bring electric energy to various parts of the project area.

Problem No. 24: What processing plants and other marketing facilities will be needed?

Problem No. 25: To locate and plan lay-out and improvement of rural parks and recreational grounds.

Problem No. 26: To formulate plans to promote the recreational use of the reservoir above Grand Coulee Dam and its shore lands.

Problem No. 27: To plan the location of sites for rural schools, churches, community halls, market centers, athletic fields and the like.

Problem No. 28: To develop the most advantageous pattern of local governmental units to meet prospective public needs.

It would be interesting, if time permitted, to poll this audience of sociologists on two questions: (1) To which of these 28 problems and specific investigations do you think sociologists should have been assigned? (2) What, if any, essential social planning problems would you add to the 28 listed above? My guess is that in answering the first of these two questions, unless you were merely upholding professional vested interests, you would be driven to a recognition that most of the other specialists involved brought to

* Each statement was much longer and therefore more definitive than space here permits. See *Columbia Basin Joint Investigations, Character and Scope*, U.S. Bur. of Reclamation, U.S. Govt. Print. Off.: Washington, 1941.

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their tasks a greater body of validated knowledge than did the sociologists. The irrigation engineers not only knew their theory but had worked on many similar projects. The other engineers—highway, electrical, and hydraulic—were similarly conditioned for their tasks. The agricultural economists brought with them an elaborate knowledge and experience in the analysis of farm enterprise and considerable experience in farm lay-out. The town planners brought little by way of tested practical experience or theory of planning, because they were either city planners or had never given much consideration to towns as rural service centers.

The sociologists could bring little more than knowledge gained from the analysis of social phenomena which had resulted from unplanned developments and a general, seldom precise, knowledge of the mistakes and pathologies which had resulted from Utopian social planning. In the face of these facts they had a quota of social reformers and promoters seeking to pinch-hit or substitute for them on committee assignments.

Sociologists were assigned the following responsibilities: (1) chairmanships of the committees to investigate the problem of settlement patterns and the problem of location of sites for service centers; (2) membership on the committees to investigate the problems of levels of living, part-time farms and laborers' allotments, financing needy settlers, villages, rural parks and recreational grounds, and local units of government; and (3) They were asked to make a number of specialized collateral investigations.

Investigation committee assignments were important because they opened wide the gates of opportunity for sociologists to make their contributions. Space does not permit an explanation of the ways by which other opportunities were presented but it is important to relate that conferences were held at which all investigating committees reported and sociologists as well as anyone else could present any ideas they cared to. Groups of investigators working on related problems also held conferences. Sociologists were invited and urged to carry on collateral studies

which it was believed would contribute to understanding of problems which were not primarily social.

The complete statement of Problem No. 9 was, "*What feasible means could be adopted or created (a) to help insure an adequate level of living, and (b) to minimize the financial commitments of needy settlers in providing suitable and essential improvements?*"

Sociologists were at first asked "to prescribe what level of living settlers should have." This, they said, could not be done, but that they would be willing to attempt to discover what levels of living settlers will probably demand; what levels, without the attainment of which, the turnover of settlers would probably be great and the morale among settlers would probably be bad. In attacking this problem it was assumed that settler families would want, and probably demand, levels of living equal to and similar to those which had prevailed in the areas from which they came; furthermore, that their standards of living would tend to be the highest levels prevailing among other farm families among whom they had lived. Data on recent migrations and the geographic sources of settlers on the most recently established reclamation settlements furnished considerable information on areas to be studied. It was therefore planned to re-analyze the Consumer Purchase Study data for four main areas of prospective settlers and to make reconnaissance field studies in these same areas in order to determine relations of levels and standards of living.

Data for three of these areas were analyzed: (1) a group of 948 native born, non-relief farm families in Western Oregon and Washington selected as representative of small full-time farms; (2) a group of 948 native born nonrelief farm families in North Dakota and Kansas to represent relatively large full-time farms; and (3) a group of 383 native born, nonrelief part-time farmers in Western Oregon. To these were added, (4) a study of 122 farm families living on the Vale and Owyhee irrigation project located in Eastern Oregon. The basic findings of this series of analyses were: that farm families in Western Oregon and Washington

whose income available for family living fell below the \$1,000-\$1,250 level went into debt to maintain their level of living; part-time farm families in Eastern Oregon followed the same pattern. Those in North Dakota and Kansas began going into debt if and when they didn't have from \$1,250 to \$1,500 available for living costs. Those on the two new irrigation projects did not go into debt to maintain their levels of living except when their incomes available for living expenses fell below \$750.¹

These findings buttressed a statement made in early conferences regarding the Columbia Basin, that "a family's standard of living has in actual behavior a first lien on family income." This statement was at that time sharply questioned by some of the economists, but it was difficult to deny after these findings were known.

The purpose of the second investigation in levels of living was to determine if possible what types of goods and services settlers will demand and the order in which they will desire to secure them. Two lines of study were planned, one a further analysis of Consumer Purchase data, the other field studies on reclamation projects similar to Columbia Basin.

As in the first study farm family records from Western Oregon and Washington and North Dakota and Kansas were used. A scatter diagram was used to show the relationship between the proportion of low and high income families reporting expenditures for particular items for which expenditures were made. Items consistently purchased by all income groups were assumed to be "cultural necessities," those purchased only by low income families were termed "cultural substitutes." Those purchased consistently by all except low income families were termed "cultural luxuries" and those purchased by only high income families were termed "cultural rarities." Only the briefest report of findings can be recorded here. They were:

1. "Cultural necessities" were food canning, washing machines, beauty and barber shop services, physicians' services, automobiles, radios, reading materials, recreation, motion pictures, and tobacco.

2. "Cultural rarities" were central heating, electric sewing machines, ironing machines, household help, and contributions to philanthropic and civic organizations.

3. "Cultural luxuries" were running water, telephones, dentists' services, and life insurance.²

Field studies of families in 10 recently settled areas were conducted not only to throw light on the problems which were especially assigned to the rural sociologists but for the additional purpose of assisting Committee 14 which dealt with the financing of settlers. It revealed clearly that families complained about both the absence of things to which they had been accustomed and the presence of new things even if the items were far superior to those they had previously enjoyed. Above everything else, they objected to having others decide the things for which their money should be spent. In one rather detailed field study settlers on a newly settled irrigation project were told that they were being interviewed because they had been and were going through the same process that thousands of families would soon experience in the Columbia Basin and were therefore an exceptionally good source of information to be used as guidance to Columbia Basin settlement. They were asked to say anything which they thought planners of the Columbia Basin project should know. One person recorded what they said while another carried on the conversation. Their remarks clearly revealed the following general opinions and attitudes of these settlers:

1. Families on new settlement projects insisted on retaining in their level of living those goods, services and consumption habits to which they had long been accustomed.

²Schuler, Edgar A. and Swiger, Rachel Rowe. *A Study of Farm Family Levels and Standards of Living in the Plains and the Northwest*, U.S. Dept. of Agr. Bur. Agr. Econ., January, 1946. (Mimeographed.)

¹Fisher, Lloyd, *Standards and Levels of Living of Prospective Settlers in the Columbia Basin*. (Unpublished.)

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2. They complained about being supplied goods and services different from those to which they were accustomed or which were not regarded as necessities by the average family in their new place of residence, even though such goods and services were superior to those which they had previously enjoyed.

3. They objected to having an overhead administration design and direct the rank and order of items by means of which their level of living was to be improved.

4. In many instances they objected to assuming a burden of debt for improved items in their level of living when the acquisition of such items was not the result of their own free choices.

5. Level of living items for each individual family competed not only with farm operation expenditures but also with each other in the final disposition of the family income; the items were variously ranked in order of preference by different families. The order of preferences frequently differed from that prescribed by the planners and administrators of the project.

6. As a result of these experiences a poor morale developed on some projects even in the face of superior goods and services provided at lower costs than would have been the case had they been obtained without the assistance of the administrators of the projects.

Because most of the interviews in this study were with men, and because these men were by and large critical of things and services that had been furnished to improve their level of living, there was a question of whether women settlers might not have different opinions and attitudes. To check this a woman interviewer was sent back into the area to interview only farm women. It was quickly and rather thoroughly determined that women's attitudes were about the same as those of their husbands. In this and other settlements studied the one item in levels of living which women mentioned more often than men was the better educational facilities and opportunities being furnished to their children. The results of the study of these 10 settlement projects have never been published but were furnished to those in charge of settlement policy and administration.

Another proposal for this segment of the

problem was to study the actual behavior choices of settlers on at least two reclamation projects. Projects were to be selected which, because of serial development of one settlement after another, furnished farms and homes at all stages of development. The method prescribed was to be as follows: investigators were to list and classify the items in the level of living which were present and absent in farm homes, upon the assumption that each family had made specific decisions in the expenditures for major items. The investigators were to ascertain in the case of each major decision why the item was selected and what other items were for the time being sacrificed. It was thought that choices would have been and were being made between such expenditures as payments on farm purchase debts, farm improvements, new farm machinery, houses, automobiles, major household furnishings, education of children, etc.

A second attack was to be the selection of farms and homes in the older settled areas which could be easily identified as having been outstanding successes or failures. The investigators were to drive through the older section of the project and where they identified a farm with an outstandingly good house, other good farm buildings, grove, orchard, etc., to go in and interview the farm family and discover how this development was accomplished. They were to do the same thing when the evidences were that little progress in development had occurred. In both types of cases, but especially in cases of outstanding success, the history and sequence of choices made were to be carefully recorded. Only one such case was analyzed but it demonstrated the feasibility of this line of analysis.

Data were secured on the presence of 22 items in the level of living of settlers and in which of the first five years of occupancy they were obtained, but these findings threw little or no light on the bases and conditions of the choices by which they were selected for purchase. In many cases it is known that reclamation settler families failed because they over-shot their farms' capacities to pay for improvements. It is probably not true,

as is often said, that it takes three layers of settlers per reclamation farm to accomplish satisfactory final development but it is undoubtedly true that good reclamation farms are not the sole proof of successful settlement methods. Had this study been carried out it would have secured valuable and complete case records on both farm improvement and farm family levels of living improvement.

Problem No. 10 was stated as follows: *"What advantages, economic and social, and what disadvantages, if any, in farm lay-out and farm work might result from the concentration of settlers in small communities or nuclear hamlets? Should experiments be made on some of the earlier project units with such farm community centers?"*

The committee did not assume that family residence locations should be determined wholly by criteria of convenience to farm work, but also by criteria of convenience to community service, trade centers, public utilities and settler desires. It did not confine itself to a consideration of choice between "nuclear hamlets" and isolated farmsteads. It knew that in the history of the 300 years of largely unplanned settlement and resettlement in this country practically every possible and known pattern of settlement had developed. It believed that it should attempt to derive from a study of this history, including 40 years of irrigation settlement experience, some sound guidance for future settlement, if not sound guides, then at least some clues for specific investigations. It knew that no critical analyses had been made of exceptions to the rule of isolated farmstead location. It therefore planned to review all the general literature on settlement patterns and carefully analyze all available studies of unique specific or exceptional settlement patterns. It also planned to make field studies of Mormon settlements, reclamation project settlements, and Farm Security and Subsistence Homesteads projects. It knew, of course, that the findings of some other investigating committees would present facts and conditions which should be taken into consideration in final analysis and planning.

It thus broadened its consideration to

"what pattern or patterns of settlement will, on the one hand, best accommodate themselves to the specific conditions which will prevail in the Columbia Basin and, on the other hand, probably best fit the habits and traditions of those who will occupy the newly created farms."

The determination by others of some physical and economic facts helped those working on settlement patterns to see clearly some of the practical boundaries within which to plan. The committee knew, of course, that the location of the main canals will have to be largely determined by topography and that this will dictate where irrigation farming can be done. Another investigating committee had determined that in some areas wells for domestic water supply will probably need to be 700 feet deep and that such wells may cost \$3,000 each. The committee knew that individual farm holdings will be restricted by law to 80 acres and that other committees had estimated that farms will average 60 acres in size. It did not, however, assume that all social planning need be determined wholly by the physical and economic planning done by others. It assumed that roads, electric and telephone lines can and should be built to accommodate whatever settlement pattern is decided on, rather than these being allowed to dictate settlement patterns. It was known, however, that the costs of these utilities must be a definite consideration.

Nothing need be said about the review of the general history of settlement of this continent. As a matter of fact that written history contains little which can be used for analytical purposes. Neither historians, geographers, economists, nor sociologists have in the past assumed that the location of farmsteads had much importance beyond convenience and efficiency in farm operation. Worse yet, most of them have assumed that to attempt to plan such locations was nothing more than to counsel with romance. Only some slight materials on "Utopian" or "Communitistic" Colonies, some on cultural islands and a few recent studies on Spanish, French and Mormon communities were available.

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* See Geddes
Living in Utah
Logan, Utah, 1911

project consisted of studies of at least two other irrigation projects, of Mormon settlements in Utah and in the Cache Valleys, in Utah, and of a number of Subsistence Homesteads and Farm Security Administration projects.

One reclamation project was studied and another was reconnoitered. Ten Mormon communities and ten Farm Security Administration projects were studied. In the one reclamation project a number of other things were being studied at the same time and therefore little more was observed than attitudes and opinions of farm people about the location of social service centers. In the Mormon communities three things were attempted: (1) to ascertain ideas and attitudes about village settlement; (2) trends toward or away from village settlement, as measured by location of all farmers' residences constructed during the past 15 years; and (3) the differential availability of utilities in different patterns of settlement. In the Farm Security projects practically every phase of new settlement experience was studied but special attention was given to cooperative projects. Few of the findings were quantitative and some of the reports were rather voluminous. All that will be recorded here is types of information which furnished guidance to the committee on arriving at its final recommendations.

It was discovered in Mormon communities that most of those who lived in villages preferred that location and most of those who lived on their farms preferred that location. Each group rationalized that modern automobile transportation made its present location now more acceptable than in the past. Those living on their farms argued that transmissible power had removed most of the difficulty in the use of public utilities. If there was any observable trend to or away from village location of recently built houses it was slightly toward "edge of village" location; moving out from the village and in from the farm.³ The committee did not find anything in the co-operative experience of the

Farm Security Administration projects which it believed it should recommend as a pattern to be followed in Columbia Basin settlement. It found on reclamation projects that the pattern of scattered farmstead location had been followed without questioning, even though irrigated farms average no more than $1/3$ or $1/4$ the size of farms out of which the isolated farmstead location had developed.

The final recommendations of this committee were:

1. That the line pattern of settlement be established, insofar as conditions permit, throughout the Columbia Basin. To this end, it was urged:

- a. That farm units be rectangular, or as nearly so as topography and other factors permit, with the long axis ranging from two to four times greater than the short axis; that the farm units be placed so that the short axis parallels the service road; and that roads serving farmsteads be spaced from three-fourths to one and one-half miles in accordance with the applicable recommendations made by the investigators of Problem 19.
- b. Furthermore, that all roadways be determined prior to settlement; the rights-of-way be obtained by the proper governmental authorities before the cost of land causes such rights to be prohibitive, and that rights-of-way for existing roads which cannot reasonably be conformed to the desired plan be extinguished before claims can be made which will hamper establishment of the plan.
- c. That community water facilities for domestic and livestock use be established and pipe laid so they will serve that number of units which, under the specifications encountered, will approximately minimize costs. Such water mains should be placed on the roadside or not more than 10 rods from the roadway. It should be provided that these mains may be tapped by the farmer at any one place along the frontage of the farm and that sufficient

³ See Geddes, Joseph A., *Farm Versus Village Living in Utah*, Utah Agr. Expt. Sta. Bul. No. 269, Logan, Utah, March, 1936.

pipe be furnished to bring water the shortest distance from the main line to the house, provided only that the house is not placed more than 10 rods from the roadside. Such procedure will maximize the freedom in placement of farmsteads with near minimum cost.

- d. That in the establishment of roadways and farm plots full recognition be made of the topography and the requirements of the irrigation system so that, wherever feasible, water can be supplied to each farm from a single delivery point. At the same time, the irrigation lands should be placed with full recognition of the optimum frequency of farm roads. Furthermore, every effort should be made to minimize service road mileage without hampering communication, and where "dead end" roads are consonant with economy, they should be constructed.

2. That wherever a group of settlers, not less than 20 nor more than 60 in number, desires to establish a farm village in an area before the establishment of the water system, these settlers either wanting to farm separate plots after the Utah pattern or to farm co-operatively, such groups be enabled to settle in villages and effect such economies as they are able, but that nowhere should such village patterns be forced upon settlers or any effort made to coerce them to undertake such settlement. The administrative agency dealing with settlers should make this privilege known to prospective settlers, and should acquaint them with the advantages and disadvantages of village settlement.

3. That such co-operatives as suggested in the foregoing and any other cooperatives be given every feasible assistance; that a technical advisory staff be maintained during the formative years of the settlement in order to assist in the establishment of farm, machinery, marketing, or any other type of co-operatives; but that membership in no way and at no time be mandatory. Governmental agencies may from time to time establish trial, experimental, or exemplificatory co-operatives which will help farmers to establish such organizations, but the committee

discourages the general governmental sponsorship of such organization, feeling that in doing so the government is going beyond its normal functions and at the same time is not acting in the best interest of co-operatives or the co-operators.

4. That wherever feasible, layouts of road and farm boundaries be established which will enable the farmer to maximize the advantages of proximity to roads plus the natural advantages due to elevation, drainage, or scenic beauty of sites lying within his holdings.

5. That no restrictions be placed on the settler which would coerce him to place his farmstead in any one location, either in the corner or near the road. However, the settler should be made to defray individually all costs incurred in putting his home away from the road, such as building a lane, piping water, running electric and telephone wires and the like for all distance greater than 10 rods from the edge of the road. Families should be discouraged from facing their houses on primary roads.

6. That responsible agencies, along with their educational activities, should make specific and diligent effort to explain the economic and social advantages of the settlement pattern adopted, and to present carefully all facts concerning the economies made possible by co-operative action and the advantages and disadvantages of village settlement.

7. That within five years after the settlement of the first block, and preferably after the second year, investigations be made of the effects of the settlement pattern adopted. Such further research should be designed to establish the economic advantages or disadvantages of line village, the social consequences of this pattern, and the attitudes of the settlers toward it. Such research should be used as a guide to the character of settlement used in later blocks to be brought under cultivation, and be considered as superseding the investigations of this report.

Problem No. 27 was stated as follows: *"To plan the location (first for the northern and the southernmost parts of the area), and, insofar as practicable, the improvement*

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of sites for rural schools, churches, community halls, market centers, athletic fields (compare Problems No. 18 and No. 25) and the like. Selections might well be made of more sites than are likely to be utilized, with the idea that some of them will be released as unneeded after the settlement of the sections involved."

This problem was relatively easier to deal with because considerable research has been conducted in the field by rural sociologists and some by business economists during the last two decades. The committee started with the assumption that the trend in location of social and cultural service institutions and agencies should not only provide its field for study but would pretty well dictate its recommendations. It therefore planned to analyze all studies which had been made on trends in location of schools, churches, stores, recreation and cultural activity centers, and in addition, to make field studies in two reclamation projects which the Bureau of Reclamation would specify as very similar to what is to be expected in the Columbia Basin.

Only a brief report need be made of the first segment of its research. It reported:

1. That for a number of decades the trend in the location of schools, churches, recreational and cultural service centers has been toward towns.

2. That only those towns which survive and grow as trade centers, except in the case of some Mormon villages, are stable locations for social service centers; that efficient economic and social services in trade centers buttress and support each other.

3. That trade centers (towns) of less than 1,500 population are to a considerable extent by-passed by farm families and towns of more than 5,000 population and become so dominated by urban persons that farmers tend to patronize smaller service centers or establish schools, churches, and sometimes recreation centers, outside their boundaries.

4. That efficient town centered rural communities have approximately an equal number of farm and nonfarm clientele and that the total population per community ranges from 3,000 to 10,000.

In the study of the two reclamation settlements, one at Ontario, Oregon, the other near Boise, Idaho, it was discovered that settlers first established and patronized service centers typical of those which prevailed in American pioneer settlement days but rapidly telescoped the trends which had occurred slowly in older established communities. Studies carried on in them therefore corroborated the findings summarized above and deepened the conviction of the planners that the social trends approach was sound in dealing with this problem.

Committee Number 27 went far beyond verbal recommendations. It took two steps in the direction of blueprinting ground plans. The first step was to map the whole geographic area of the Basin into community areas each of which would have a farm population of slightly less than 4,000 when fully developed, each presumably to be served by a trade and service center. This was not difficult because the farms were already laid out and thus the farm population could be estimated. These trial areas varied from an estimated maximum future farm population of as high as 5,488 to as low as 2,328, *i.e.* from 1,372 to 532 farm families. Existing trade centers, railroads, highways, and topography were taken into account and it was not assumed that all service centers would be located at the geographic center of the mapped communities, or even too confidently expected that either all the community area or service centers will ever come into existence as living realities. It was believed that this was a useful step to take between research findings and actual geographic planning.

The second step was to remake the map in the direction of further compromise with existing centers, existing transportation facilities, and expected developmental forces. These service areas are all laid out on a map and thus for planning purposes are as geographically precise as farm lay-out or road designs. It is believed that some of the existent and early established towns will so thoroughly establish themselves in rendering services to early settlers that their leadership will not be easily overcome; that present

railroad locations will be highly influential; that some additional, especially apt, town sites should be utilized. It is therefore expected that these and other factors will keep some of the planned service centers from ever developing and thus deny farm people, just as many of them are denied now, the best services that ideal planning can conceive. But the sociologists who worked on this problem feel that they have provided an understanding of trends and factors which might have been overlooked or disregarded and that they have been objective and practical, not Utopian, in both their findings and recommendations. The opportunistic actions of early settlers will undoubtedly sharply alter the geographic and population service patterns which the committee has recommended but it is expected that the patterns recommended will also influence not only the actions of early settlers but also influence the economic and physical elements in the total plan for the Basin.

This paper is a report on an experiment in planning, not a theoretical discussion. It does not adequately set forth the fact that sociologists did not complete every task to which they set their hands in attempting to make their contribution to this piece of giant planning, much less has it listed a number of things which they felt they might have done but which they neither did nor planned to do. I think it is highly probable however that what they did try to do and what they accomplished will reveal, both to them and to others, the what and the how of their contributions in future projects of this kind.

DISCUSSION

by

Marion Clawson, *Bureau of
Agricultural Economics*

Dr. Taylor has presented a good deal of detailed information relative to planning of the Columbia Basin irrigation project. Planning of irrigation projects will be important in the next decade or two, because of the probable large volume of irrigation development. Probably no other single project will be as large as the Columbia Basin, but in the aggregate they will total far more. Even more important, however,

is the light which this planning study throws on the role which social scientists in general and sociologists in particular can and should play in economic planning of other types. Irrigation projects are only a special instance in the larger field of general economic planning.

I wish to add a few comments about the Columbia Basin planning; then to contrast it with similar planning for the Central Valley Project in California; and finally to generalize a little from these experiences, as to the role of social scientists in economic planning. My comments will obviously be based largely on my experiences as a *generalist* or *coordinator* on these particular studies.

One major favorable factor in the Columbia Basin Studies was that, with one exception, the major issues of over-all policy were rather definitely settled before our studies began. The project was authorized and under way; physical factors largely governed the location and area of the lands to be irrigated; our job was to plan, within these broader decisions, *how* the area could most soundly be developed. I do not mean to exclude social scientists from participation in these broader decisions, though they are obviously only one of the groups which should have a voice in them. But unless you have such over-all policies established, specific planning is very difficult if not impossible. It was not our function to question the wisdom of the project as a whole, for instance; that decision had been made and implemented.

The one exception to the major policy decisions was the type of settlers for whom the project was being built. Should we plan for essentially needy people, and to give them only bare subsistence; or plan for people of considerable capital, and to give farm operators maximum incomes irrespective of income to other farm people? The President, Congress, and local people either had not expressed a clear preference on this point or were in disagreement. Lacking a clear directive on this point, our decisions were (1) to plan chiefly for a somewhat intermediate type of settler—that is, one with some but limited capital, and for moderate incomes but definitely well above subsistence; and (2) to recognize in our planning that a wide range of abilities, characteristics, and desires would be found among the settlers, and to provide adequate flexibility to meet such variations.

This leads directly to one phase of our planning, which I should think would impress sociologists as a serious flaw, though I believe it was

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inevitable. We were planning for a group about whom we knew very little, and were not planning *with* them. As Dr. Taylor has told you, the present number of inhabitants of the area is only a small fraction of the ultimate population. Many of the present farmers will prefer to sell their land and leave the area, rather than undertake the more confining type of farming that irrigation will bring. Those who will ultimately settle the area are widely scattered and often unknown even to themselves; possibly someone in this audience will be among the settlers. I regard planning with those affected as an essential, and believe that the technician's role should generally be subordinate to that of the citizen. But under the conditions existing in the Columbia Basin, our planning was for other people, in the worst sense of that term; and we were never able to devise any practical alternative.

One other feature of the Columbia Basin Studies deserves special mention. In order to keep all the committees moving, to avoid conflicts or gaps between them, and to obtain a reasonably co-ordinated over-all plan rather than a series of unrelated partial plans, the Bureau of Reclamation placed a Field Coordinator on the job. An unusually capable man, E. N. Torbert, an economic geographer with experience in planning, was selected. The Department of Agriculture designated me to act as a Field Representative for the entire Department on these studies. I think everyone will agree that our efforts, and particularly those of Dr. Torbert, aided greatly in obtaining the results that were secured.

Dr. Taylor has given you some idea of the interrelations between different committees and among types of specialists. If time were available, I could tell you of numerous instances of give and take and of mutual adjustment—the farm management and marketing specialists over crop rotations; the sociologists and the irrigation engineers over shape and arrangement of farms; the highway planners and the irrigation engineers; and various others. The various specialized parts of the entire study had to be carried forward and then checked against and integrated with other specialized studies.

Time will not permit detailed discussion of the studies made for the Central Valley Project of California. The presently authorized project is roughly one-fourth of the ultimate developments in this valley, which may take 25 to 50 years. The presently authorized project includes less land but involves a nearly equal expenditure

of federal funds, as the Columbia Basin. The area involved is in or adjacent to well-developed farming lands. Economic pressure groups are well-organized, highly vociferous, and politically active. They were not only interested in any studies made of their valley; they wanted to participate in them, to influence the conclusions, and on occasion even to try to influence the data used. These groups may represent the actual settlers only poorly, but they were a major factor which any planner had to consider.

Another major problem in the Central Valley was lack of as clear a definition of major policy issues as had existed in the Columbia Basin. The area to be irrigated has still not been defined fully; the relative emphasis upon hydro-electric power and upon irrigation has been the subject of difference of opinion; a major battle raged, in Congress and in the Valley, over the type of rural society to be encouraged; and the issue of public, low-cost versus privately distributed power is now being actively fought. Under the circumstances, planners were uncertain as to the "givens" in their equations and as to the ends they were seeking to attain. Several committees were unable to reach any real consensus, and others submitted reports reduced in content to such a low common denominator of agreement as to be nearly useless as a guide to action. Judged by their technical competence and value as guides to sound administrative action, the Central Valley Project Studies were clearly inferior to the Columbia Basin Joint Investigations.

In spite of this, the social scientists made as good or better contribution to the Central Valley Project Studies as to the Columbia Basin Joint Investigations, and with less total expenditure. This was largely due to more centralized direction and operation in the Central Valley Studies. In the Columbia Basin, a number of units of the Department of Agriculture, administratively semi-independent and directed from different headquarters, participated in the studies. Diversion to other work of their respective organizations was fairly common; co-ordination of results took time and effort, in part simply because of the physical dispersion of the participants. The organization was loose-jointed; with the best of spirit and desire to co-operate, there was unavoidably considerable waste motion. In the Central Valley, on the other hand, a group of workers was assembled, to work full-time on the studies and under more centralized direction. The results were substantially increased output per man

and greatly increased effectiveness of the group.

These specific experiences may provide the basis for some generalizations of at least tentative character.

What can social scientists in general and sociologists in particular fairly be expected to contribute to economic planning such as the Columbia Basin and Central Valley Studies? It seems to me that there are two broad contributions: (1) specific information and (2) "viewpoint." Dr. Taylor has enumerated some items of specific information contributed to the Columbia Basin Studies. There are many things which social scientists know or can readily ascertain that are of value to physical scientists, administrators, and others. Such a contribution is not negligible. To the extent that they know what to look for, persons other than social scientists could ascertain such facts, through perhaps only at greater cost. Less tangible, but perhaps more important, is "viewpoint." Social scientists are trained to discover certain types of facts, to analyze them in certain ways, and to be alert to certain types of relationships. Sociology, with its emphasis upon "life as a whole" may be of special value in this connection. To the extent that social scientists fully understand and take account of the basic physical facts of a situation, and are willing to subordinate or co-ordinate their special interests with those of other specialists, the social science viewpoint can be both constructive and effective in co-operative planning with others. Certainly this was true for both the Columbia Basin and Central Valley Studies.

Generally speaking, social scientists have not participated in "team" research—certainly not to anything like the extent that physical scientists, particularly those in industry, have done. I think this is a serious shortcoming. The most difficult problems generally lie at the crossroads of two or more special fields of study, rather than squarely in them. Each specialist can take the easy way out—simply point out that a particular problem is largely outside of his field. Even if he tackles it, his unaided efforts may not be wholly successful. Unless or until social scientists learn to organize and conduct

"team" research, they will be less effective than they could be.

"Team" research in the social sciences involves at least three difficult problems: (1) careful definition of the problem to be studied. While this should be an essential first step in single person research, it is doubly important and doubly difficult for team research. Each specialist is likely to see the problem in terms of his specialty; synthesis and perhaps something more must be obtained in some fashion. Based on my limited experience, I should say it is not easy but highly fruitful when realized. (2) Careful definition of the part each group is to play. Final commitments cannot be and probably should not be made at the beginning; constant review and consultation is essential. If the various parts of a complex set of studies are to fit satisfactorily in the end, they must be adjusted one to another. This requires informed give and take, which many social scientists are loath to accept. I am afraid that I must say that in my experience, sociologists have been one of the more difficult groups to bring into adjustment with other groups. The very jargon of each requires understanding by the others. (3) Reconciliation of the need for substantial centralized control over the group with the necessity of preserving academic freedom of expression and individual freedom of thought. If work on the central problem is to advance expeditiously, the various parts must move forward in synchronized fashion even if some interesting bypaths remain unexplored. Differences of opinion among various groups must be reconciled some way, and any gaps plugged. At the same time that fairly strong central direction is given, no individual should feel that he is prevented from exercising his full professional abilities or from expressing his views on any topic.

While there are difficulties that must be faced in team research and planning, I believe it can be done so as not only to make the group more effective but also to leave each participant convinced that it had been better for him than individual efforts on his part would have been.

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INTERRELATIONS BETWEEN CERTAIN SOCIAL BACKGROUND AND PARENT-SON FACTORS IN A STUDY OF COURTSHIP AMONG COLLEGE MEN*

ROBERT F. WINCH
University of Chicago

INTRODUCTION

IN AN earlier paper¹ the writer endeavored to answer the following question: how do engaged and married college men differ with respect to certain attitudes towards their parents from the unmarried, non-engaged group in the same population? Data to answer this and other questions were obtained by the questionnaire method. In the questionnaire an effort was made to conceal the purpose of the inquiry and so to phrase the questions as to cause the subject to betray feelings of which he might be unconscious or which he might be unwilling to reveal.

The sample was drawn in March, 1941, from sociology classes in sixteen midwestern co-educational colleges and universities having chapters of national fraternities and sororities. So-called "street car" colleges were avoided. Only native-born, white, non-Jewish respondents who were between nineteen and twenty-five inclusive and whose parents were still living together were included.²

To create what was in essence the dependent variable of the problem an effort was made to scale progress in courtship in terms of steps crudely corresponding to the "just noticeable difference" of the psychophysicist. These steps ran from "no dating," "occasional," and "frequent" to "going steady," various types of "understandings," and marriage.³ Given responses as of the moment of

writing and for the preceding six month period, there were four indications which were treated as variables and designated as measures of "degree of courtship behavior."⁴

To obtain evidence on the number of different girls dated and the number of dates the variables "range" and "frequency" of courtship behavior were included.

In an effort to chart the parent-son relationships as seen from the son's viewpoint, the following elements were laid out:

- a. Son's feeling of love or hostility to the parent.
- b. Intensity of *a*.
- c. Magnitude of fluctuations between love and hostility.
- d. Feeling that parent endeavored to dominate subject.
- e. Feeling of having submitted to parental domination.

Each of the above was scored separately for each parent. In addition data were developed upon:

- f. Absolute value⁵ of the difference between love-hostility father score and love-hostility mother score.⁶

It was found that the father-son relationship as thus measured had negligible explanatory value in accounting for variance in degree of courtship behavior, but that the mother-son relationship was somewhat significant. Thus, in general, the higher the son's degree of courtship behavior, the lower was his love of mother and the greater was

* Paper delivered at annual meetings of the American Sociological Society, Cleveland, March, 1946.

¹ "The Relation between Courtship Behavior and Attitudes towards Parents among College Men," *American Sociological Review*, VIII (1943), 164-74.

² For the rationale of this selection, see *ibid.*, pp. 170-71.

³ For a more extended exposition of this point, see *ibid.*, pp. 165-66.

⁴ Responses falling toward the "marriage" end of the sequence are regarded as showing "high" degree of courtship behavior. Those falling near the "no dating" end are regarded as "low" degrees.

⁵ I.e., only the magnitude and not the sign of the difference was used.

⁶ Further exposition of these elements appears in *ibid.*, pp. 166-70

the intensity of his feelings. Of marginal statistical significance were the findings that high degree of courtship behavior was correlated with greater fluctuations of feeling towards the mother and with the feeling of having been submissive towards her.

Although the research findings reported here emerge from a study whose purpose was to account for differential degree of courtship behavior in college men, it will be seen that some of the more significant findings are interesting not for the illumination they shed on the initial problem but for the interrelationships and constellations which they point up. The purpose of this paper is to consider the relationships between degree of courtship behavior and certain psychological and social background factors, and the interrelations among these and the parent-son variables.

RELEVANT ELEMENTS IN THE FAMILIAL AURA

In addition to his attitudes directed specifically towards each parent, it was assumed that the subject carried certain conceptions of reactions and expectations in which it was assumed to be relatively inconsequential whether the subject viewed one or the other parent as being the prime factor. Hence data were obtained with no effort to separate the influence of mother and father on (a) the parents' reaction to his early interest in dating, (b) on his rating of his parents' marital happiness, and (c) on his expectation that one or more members of his family would be financially or emotionally dependent upon him within the next decade.

Early dating situation. Table 1 shows that favorability of early dating situation is correlated with degree of courtship behavior. Other entries in the "early dating" column of the table show that favorability of early dating situation correlates positively with love for father and submissiveness-mother. In the earlier article it was reported that submissiveness-mother correlated positively with present degree of courtship behavior.⁷ These relationships suggest a tendency for the son who loves his father and is sub-

missive to his mother to have parents who encourage him in dating activity. The small but significant negative correlation between dominance-mother and early dating situation suggests that the sons whose mothers disapproved of dating activity were disposed to regard those mothers as dominating (this conscious recognition implying a tendency to rebel against the alleged domination).

Favorability of the early dating situation is positively correlated with frequency of dating in the previous six-month period. This correlation holds up when the economic factor, as measured, is partialled out (partial $r = .22$).

Parents' marital happiness. The subject's rating of his parents' marital happiness has relatively little value in accounting for variance in degree of courtship behavior. Only one measure of the latter shows a significant correlation in the expected direction.

The correlations of parents' marital happiness with the parent-son variables are relatively impressive. These correlations corroborate the often verbalized but infrequently substantiated relationship between the subject's conception of his parents' marriage and his feelings toward his parents. The correlation between parental happiness and the absolute difference between love-hostility-father and love-hostility-mother suggests a tendency on the part of the subject to be partial to one or the other parent in the conflict situation. It was reported in the earlier article that the magnitude of difference in feeling towards the two parents correlated positively with love for mother and negatively with love for father. Parents' marital happiness correlates positively with both of the latter, but the correlation is significantly larger in the case of love-hostility-father. These findings suggest that when the parents' marriage is a happy one, there is a tendency for the son to prefer his father, and when it is unhappy, for him to side with his mother. This idea is further strengthened by the appreciable positive correlation between parents' marital happiness and submissiveness-father while that between parents' marital happiness and submissiveness-mother is non-significant.

⁷ *Ibid.*, table 1, p. 171.

TABLE 1. INTERCORRELATIONS OF CERTAIN SOCIAL BACKGROUND FACTORS, PARENT-SON RELATIONSHIPS, AND MEASURES OF COURTSHIP BEHAVIOR.* (N=435)
ROBERT F. WINCH, UNIVERSITY OF CHICAGO

Row	Range	Frequency	Early Dating	Parents' Happiness	Obligation	Career Drive	Wish Married	Wish Children	Economic Status	Social Status	Appearance	Age	Size School	Sex Ratio	Row
1	Present Degree of Courtship Behavior	320	086	174	178	-343	619	056	147	151	-021	353	-029	-020	1
2	Past Degree of Courtship Behavior	221	107	073	081	-300	382	-069	050	031	085	213	-095	-095	2
3	Low Degree of Courtship Behavior	134	206	180	118	-318	393	-086	081	008	072	200	-090	-107	3
4	High Degree of Courtship Behavior	108	223	103	103	-345	424	-044	025	000	106	248	-055	-050	4
5	Range of Courtship Behavior	326	065	-030	059	037	062	102	171	208	182	-130	-024	-025	5
6	Frequency of Courtship Behavior	336	231	-007	059	-042	194	196	203	304	252	-033	-061	-111	6
7	Love-hatred—father	043	196	494	-192	-057	092	272	304	223	105	104	-104	-096	7
8	Love-hatred—mother	109	071	086	368	-252	016	034	276	185	143	173	-050	-046	8
9	Intensity—father	074	046	018	-180	-023	111	-109	028	005	-005	-042	-053	-010	9
10	Intensity—mother	-068	-044	-033	-222	001	-029	-078	-029	-037	118	-066	-088	-040	10
11	Fluctuations—father	078	007	-052	-196	031	024	093	011	-031	-021	-048	093	089	11
12	Fluctuations—mother	040	-025	-006	-170	032	015	077	-003	-043	020	-043	048	037	12
13	Dominance—father	154	086	-009	-130	-118	020	105	101	032	109	-189	011	-008	13
14	Dominance—mother	027	-007	-123	-241	143	092	-075	-173	-035	138	-111	036	036	14
15	Submissiveness—father	050	062	099	263	-103	006	026	244	134	093	-131	041	061	15
16	Submissiveness—mother	-063	-170	147	-107	-222	-041	174	112	-102	248	-253	078	074	16
17	Abs. diff. bet. l-h-f & l-h-m	054	032	-097	-286	-028	065	-076	-031	001	054	-084	010	040	17
18	EARLY DATING Situation	065	231	286	286	-001	-210	180	012	143	059	057	-041	-057	18
19	PARENTS' Marital HAPPINESS	-030	-007	286	-358	-095	-095	-004	158	231	274	196	-191	-154	19
20	Feelings of OBLIGATION	059	-118	-001	-358	118	-180	-091	-213	-047	023	-076	-076	-072	20
21	CAREER DRIVE	057	-042	-210	-095	118	-349	-079	-079	-048	-144	-073	067	088	21
22	WISH to be MARRIED	062	194	180	-094	-180	-349	515	159	104	296	-047	019	-024	22
23	WISH to Have CHILDREN	102	196	012	158	-001	515	222	222	198	094	-049	020	037	23
24	ECONOMIC STATUS	171	263	082	231	-213	-079	198	402	402	190	-098	-159	-121	24
25	SOCIAL STATUS	208	304	143	159	-047	-048	104	402	344	344	-128	-226	-212	25
26	APPEARANCE	182	252	059	274	-023	-144	296	190	344	135	135	078	086	26
27	AGE	-130	-033	057	-106	-076	-073	-049	-008	-128	135	018	018	000	27
28	SIZE OF SCHOOL	-024	-061	-041	-101	-076	067	019	-159	-226	078	018	018	896	28
29	SEX RATIO of School	-025	-111	-057	-154	-072	088	037	-121	-212	086	000	896	896	29

* Note: $\sigma_r = .048$; $2.5\sigma_r = .120$. With 433 degrees of freedom the probability of chance correlation equal to or greater than .120 and with observed sign is less than .01; with sign ignored, the probability exceeds .01 very slightly. Coefficients which are equal to or greater than .120, sign ignored, are shown in bold face type. All decimal points have been omitted.

Before leaving this variable, we might note that a glance down the column reveals it to be a sort of summary of parent-son relationships.

Feelings of obligation. Some individuals, it is frequently asserted, do not marry because, having relatives whom they must support, they find that their economic prospects do not justify undertaking the additional burdens of matrimony. This conception of feelings of obligation seemed to the writer to omit a consideration of at least conceivable importance: the matter of feelings of obligation on other than economic grounds. In this study "feelings of obligation" is defined as taking account of both the expectation of financial and of emotional dependency of some person on the subject.⁸ Either type of obligation was given extra weight if reported to be a deterring factor with respect to marriage. Eighty of the 435 cases reported the non-economic type of obligation but only 15 reported that it was an inhibiting factor.⁹

The one significant correlation between obligations and degree of courtship behavior is opposite in sign from that which would be expected on the basis of the usual conceptions. While the evidence is far from compelling, it is interesting that the expected relationship does not prevail in this group which has both parents together in the home. It may be that college students regard our higher degrees of courtship behavior as still considerably removed from marriage and hence that they entail no implicit commitments.

From the negative correlations between obligations and love-hostility-father and love-hostility-mother, one may infer some degree of resentment towards those parents to whom the obligations are felt (assuming that in most cases the obligations would be

to parents). A somewhat different emphasis is possible in the suggestion that the anticipated obligation may lower the respect of the subject for his parents. This interpretation, which is supported by the negative correlations with both submissiveness variables, will be considered under the heading of economic status.

WISHES RELATED TO LIFE ORGANIZATION

Career Drive. Not wishing to overlook an opportunity to cast some slight illumination on the bit of folk wisdom to the effect that there is an actual question of choice between marriage and a career, we inserted a set of items whose purpose was to measure what might be called "career drive." The set consisted of five items presumed to sample three types of considerations: (a) the actual length of time the subject thought would elapse before he could become economically productive; (b) whether or not he regarded his career plans as inhibiting his dating activities; and (c) three opportunities to rate comparatively career versus marriage and family life. The hypothesis that a negative relationship should prevail between career drive and degree of courtship behavior is corroborated by the results.

For the purpose of this presentation perhaps the most interesting observation is that career drive has no significant correlation with any parent-son variable. The only others to show no significant correlation with parent-son relationships were size and sex ratio of college attended. The only interpretive clues concerning the social psychological significance of this variable come from negative correlations with favorability of early dating situation and appearance¹⁰ and a positive correlation with the abridged form of the Thurstone Neurotic Inventory.¹¹ From these intercorrelations a very tenuous interpretation can be made of the less handsome fellows with some feelings of inferiority, having had less favorable experiences in early dating, and having diverted their en-

⁸ By "emotional" is meant that the subject feels that he must "take care" of someone (who is perhaps ill or hypochondriacal) and that such "care" will require so much of his time and attention as to cause him to hesitate to engage in a relationship with a girl which might ultimately lead to marriage.

⁹ It should be recalled of course that all broken-homes cases, in which the probability of both types of obligation should be greater, were excluded from the group studied.

¹⁰ To be taken up below.

¹¹ Not shown in the table. The correlation is .23.

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ergies from the conquest of women to the conquest of the world.

Wish to be married. Other things being equal, one would assume that those who wish to be married would appear closer to marriage on a scale designed to measure progress towards marriage. This hypothesis seems to be unequivocally corroborated by some of the largest correlations in the entire table.

There are certain interesting dissimilarities between degree of courtship behavior and wish to be married. While the former showed some correlation with mother-son variables, the latter correlates with but one and then in the opposite direction—a negative correlation with submissiveness-mother. The former correlated positively and the latter negatively with obligations. The former showed no correlation with wish to have children; the latter correlates positively and very significantly. The significance of these differences is not manifest.

Wish to have children. The table shows that while wish to have children correlates positively with wish to be married, it significantly correlates with none of the four measures of degree of courtship behavior. In an effort to see whether these zero correlations concealed a curvilinear relationship, the original data were examined closely. The results were negative. It seems evident that among this group of college men the dating situation is not consciously viewed as an immediate prelude to founding a family and the attendant responsibilities.

Wish to have children correlates positively with number of dates, love for father and mother, submissiveness to father, and parents' marital happiness. We shall see below that it correlates positively with economic and social status.¹²

¹² The empirical studies on differential fertility among college graduates have tended to show a positive correlation between income and fertility, an association which is the reverse of that in the general population. Cf. E. Huntington and L. F. Whitney, *The Builders of America* (New York: Morrow, 1937); F. A. Woods, "Survival of Ability," *Science*, LXVI (1927), 429-30; J. C. Phillips, "Success and the Birth Rate," *Harvard Graduates' Magazine*, XXXV (1927), 565-70; O. P. Dennison, "Parenthood Attitudes of College Men," *Journal of Heredity*, XXXI (1940), 527-31.

STATUS, APPEARANCE, AND AGE

To determine the relationship between economic and social status and the variables already considered involves first the formulation of the status variables in the values of the campus.

Economic Status. On a midwestern college campus economic status has much less range than in a metropolitan center. The criteria used were: whether or not the subject had earned part or all of his expenses, the money value of his consumption per year,¹³ a feeling of having been considerably restricted in dating activities by lack of money, availability of automobile and its value, and a rating of subject's family against what he has learned about the families of other students in terms of economic status.

Only one of the correlations with degree of courtship behavior is significant although all are positive. The correlations with range and frequency of courtship behavior show that those of higher economic status date more girls and more frequently, even though they do not so reliably show higher degrees of courtship behavior.

It might have been expected that the highest correlation in the economic status column would have been with social status but that the next highest would be with love-hostility-father seems far less obvious. It is possible that in this correlated variance we are dealing with a "love" akin to what we denote by the word "respect." The argument is that if the father is successful in providing a high economic status for his son (in terms of campus standards), he has earned the respect of his son.¹⁴

The correlations in the economic status column seem to imply a tendency for fulfillment of the cultural definition of American family organization when the economic status is high. Presumably the family has

¹³ In order to take account of the differential consumption of those who boarded and those who lived at home, two series were made and each expressed in standard scores.

¹⁴ When love for the other parent is partialled out, the correlation between economic status and love-hostility-father is .22, that between economic status and love-hostility-mother is .06.

relatively substantial means, the father has the respect of the son; although the father is not distinguished as having appeared dominant in his relationships with his son, the son's plans have been largely in accord with his father's wishes,¹⁵ the mother appears to be less dominant than average, the son exhibits less "neuroticism";¹⁶ although submissive to the father, the son appears also to be more "masculine" than average,¹⁷ to have greater wish to be married and to have children; and his parents' marriage is rated as having been happier.

These relationships are practically the profile of the stereotype of the ideal American middle-class family. The polar type suggested by the data is one wherein the father is not so successful, where the son is rebellious, expresses hostility rather than love towards his parents, wherein the parents' marriage is regarded as less happy than average, where there is evidence that the mother is more dominant than the father, while the son is more "neurotic" and less "masculine."

*Social Status.*¹⁸ Three kinds of evidence were used to measure social status: (a) fraternity membership, because where the fraternity system is strong¹⁹ it provides a fairly

¹⁵ Cf. correlation between economic status and submissiveness-father.

¹⁶ Correlation between economic status and abridged Thurstone Neurotic Inventory is -.19.

¹⁷ Correlation between economic status and abridged form of Terman-Miles M-F Scale is .14.

¹⁸ The relationship between "rating" and dating is a very conscious one in campus societies, as is indicated in the following excerpts from personal documents:

"It's a lot of fun to be able to date around, particularly if you have someone who 'rates.'"

"For a fellow to rate means that whenever he wishes he can get a date with any girl he wants on the campus, providing of course that she isn't going steady. . . ."

¹⁹ As at the schools where these data were obtained. The following excerpts from personal documents reveal the significance of the fraternity system in the dating situation:

"The question of fraternity and sorority affiliation has a great deal of importance . . . the feeling of superiority or inferiority is there. I have heard that fraternities definitely demand that their men do not date non-sorority women. Almost the same thing is true for the opposite situation. . . ."

rigorous social grading system in terms of campus standards; (b) other activities, offices, and athletics, because these are both vehicles for the acquisition of prestige and media for acknowledging it;²⁰ and (c) subject's rating of his family's social status relative to the families of other students, because (1) the family is partially responsible for the creation of the person whom the campus society is to rate, and (2) the family provides the person with a family reputation which will probably be reported to the campus society by others from the same home community.

As in the case of economic status, only one of the correlations between social status and degree of courtship behavior is significantly positive. The correlations of social status with number of girls dated (range) and with number of dates (frequency) are higher than in the case of economic status.

As would be expected, the positive correlation between economic and social status is considerable but certainly low enough for them to be regarded as distinct. With respect to the parent-son relationships the correlations of social status seem to be a reflection of economic status. They are somewhat less definite but in the same direction. The dif-

"A girl or boy in a top rating organization is always considered more eligible than one in a less ranking fraternity. The first question asked when mentioning a person is 'What is he?' or 'What is she?'"

²⁰ Testimony from personal document concerning activities:

"Who can date whom and why? Let's consider what makes a fellow rate. It certainly isn't scholarship, at least not scholarship alone. However, if he has certain other qualities, scholarship doesn't take him down any. Sports seem to play an important part. And of sports, football is the most important. The captain of the football team is one of the top men on the campus. Tennis is quite a help and a star cross-country man might get somewhere. Next come politics and the offices that are derived through politics. These include editorship of student publications, Junior Prom chairmanship, etc. Dramatics has quite a pull too. The particular fraternity to which one belongs plays a role to some extent. But if a man really has something, he will be given credit regardless of his organization—unless he is an independent. Then he may rate with the fellows but not with the girls."

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ferences are in general very reasonable in terms of our assumed difference as to what they are measuring. The negative correlation of economic status with dominance-mother is reduced to non-significance in the social status column. This is quite consistent with our interpretation of family organization in terms of the father's economic accomplishments. Economic status correlates negatively with obligations while social status does not. The negative correlation between social status (in campus terms) and age is barely significant.

Appearance. One of the more difficult practical problems was that of trying to get some measure of the appearance of the subjects. (The questionnaire was being given practically simultaneously at sixteen institutions over a range of about a thousand miles.) Photography was ruled out on the basis of great cost, difficulty of administration, and loss of the attribute of "vitality." Ratings by the administrators of the tests were ruled out on the basis that such a task might justifiably be regarded as an imposition by some co-operators and would be subject to error in the variance of the standards of beauty used.

Would it be possible to create a self-administering test of appearance? This seemed a dubious venture, for do not most people think of themselves as not handsome, certainly not ugly, but rather good looking? Since, however, no alternative seemed available, an attempt was made to create a form of some validity which the subject could fill out.

Appearance was conceived in a broad sense to include body structure, facial features, grooming, dress, mannerisms, and the presence or absence of such disease, malformation, and malfunction which could enter into the impression one makes on others. Height, weight, and weight-height ratio were obtained and scored. Self-ratings were solicited on facial features, grooming, interest in clothes, comparative standing in dress, and general comparison in overall appearance. Feeling that poise and self-assurance were a part of the appearance domain, the writer included questions on nailbiting and

other nervous mannerisms. There was still the problem of covering other aspects of appearance which, though important, were not yet treated. An attempt was made to resolve this difficulty by devising a checklist of 39 items which seemed to the writer to exhaust the remaining possibilities. An opportunity was given to the subject to indicate whether or not he thought any of the latter items were important by underscoring any which he believed might have hindered him "in establishing social relationships with persons of the other sex."

Still feeling uncertain about the efficacy of the test, the writer arranged to be present at two administrations of the schedule. Posting himself at one of the exits on each occasion, he subjectively rated each subject on appearance on a five-point scale as the subject approached and handed to the writer the completed schedule. Since the subjects were filing out at the close of a class hour, the writer had only a second or less in which to judge the appearance of each subject. Each of the two groups was divided into the two sex groups, giving four different groups on which to test the appearance test. In view of the rather difficult circumstances surrounding the "criterion" (*i.e.*, with "flash" judgments on a five-point scale), it was heartening to see that the average of the four correlations with the scores made by the subjects' self-ratings was .54.²¹

The hypothesis that there is a positive correlation between appearance and degree of courtship behavior is not corroborated. While it is to be assumed that appearance is a more selective factor with women than with men, it is surprising to the writer to see no evidence of association here.²² It was

²¹ At the University of Wisconsin the correlation between the subjects' ratings and the writer's ratings on appearance was for men .71 ($N = 25$), for women .36 ($N = 37$); at the University of Chicago, for men .43 ($N = 24$), for women .65, ($N = 34$). The University of Chicago group was not used in the present study.

²² One male subject commented: "Criteria for rating differ between men and women in that a girl must be attractive or have a pleasing personality, while the fellow merely has to pass as not displeasing."

thought that perhaps the importance of the men's appearance would be a function of the sex ratios on the various campuses, *i.e.*, that where the sex ratio was high the girls would be more fastidious in their choices. The partialling process reveals no such relationship.

As in the case of both economic and social status, appearance correlates positively with range and frequency of courtship behavior. It appears, therefore, that the better looking men do date more and with more women even if they do not show a higher degree of courtship behavior. As would be anticipated, appearance correlates positively with both economic and social status. Those with more means can spend more on their appearance, and those who look better have an initial advantage in obtaining social acceptance.

The correlations of appearance with several other variables seem to reveal a pattern quite similar to that of economic and social status. The writer suspects that there is a personality-test-like quality present in all three of these sections.

Age. The hypothesis was advanced that within the age group studied (19-25 inclusive) there would be a positive correlation between age and degree of courtship behavior. Although the association is not close, it is apparent from the table that it is clearly significant. There is no association with frequency of dating, but the older men tend to date fewer girls.

All the significant correlations between age and the parent-son relationships are negative. This seems to indicate progressive emancipation and independence coincident with the passage of more years away from home. It is suggested also that the increased objectivity which accompanies emancipation tends to make the older subjects more critical of their parents' marriage.

Just why age should correlate positively with appearance and negatively with social status is not obvious. In the case of appearance it may be that it takes the student some time before he is able to turn himself out in the approved collegiate fashion. With respect to social status, it should be borne in mind that our age range includes the

twenty-five-year olds. Conceivably the upper two or three years include students who have been out of college for a year or more. If this should be the case, it would be likely that these irregularities would result in lower rates of participation in activities.

SCHOOL DIFFERENTIALS

Size of school. Just as the city has a larger proportion of unmarried adults than the town, one might hypothesize that there would be a negative correlation between size of school (student population) and degree of courtship behavior. The evidence shows no relationship, nor is there any between size and range or frequency of courtship behavior. Since the large schools studied are state schools, while the small ones are private, it is quite reasonable that size should correlate negatively with economic status. Since large universities ordinarily have a lower proportion of fraternity membership and since there is a much broader competitive base for activities, offices, teams, etc., the negative correlation with social status is understandable.

The negative correlation between size of school and parents' marital happiness continues to hold, although in reduced magnitude after economic status has been held constant (partial $r = .15$). It may be that the larger universities select larger proportions of students from areas of cities where family disorganization is higher, while the smaller (erstwhile denominational) colleges select more largely from middle-class suburbs and towns where family disorganization would be at a lower rate.

Sex ratio of school. At the outset it seemed that the sex ratio of the student population should be correlated with variation in degree of courtship behavior. This hypothesis too failed of confirmation.

It will be noted that sex ratio correlates very highly with size of school. The large universities are heavily masculine. In this study the University of Wisconsin had a sex ratio of over 200, while those of the smaller colleges were around or below 100. Because sex ratio is so closely correlated with size of school, no new interpretations are neces-

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SUMMARY AND CONCLUSIONS

In attempting to see some structure in the evidence, we find that one of the most interesting interpretive patterns concerns the emergence of types of family organization. The writer had no such pattern in mind in planning the research, and therefore the organization of the research is not such as to make the interpretation indisputably compelling. We have examined a number of strands of evidence, however, which are consistent with the interpretation and lend to it a degree of plausibility.

The two polar types of middle-class family organization suggested by the data are: (a) Father is regarded as successful. Parents' marriage is seen as happy. The son respects the father and follows his ideas. The mother is not thought to be dominant. The family does not impose on the son obligations for financial or emotional support. The son shows high range and frequency of courtship behavior. (b) In the opposite type the son implicitly reports an unsuccessful father, dominant mother, unhappy parental marriage, prospect of obligations, and the son scores low in "masculinity" and high in "neuroticism."²³

In evaluating parents' marital happiness we surmised that in those cases reported as happier the son preferred ("respected") the father, and that in the conflict situation implied in the less than average happiness he tended to side with the mother. We saw that favorability of early dating situation correlated positively with degree and frequency of courtship behavior and also that the son who is submissive to his mother tends to have a mother who encourages him in dating. If we add favorability of early dating situation to our first type of family organization, it appears that the type with minimum conflict appears to create a personality in the son by means of which he is able more easily to relate himself to women. From

the data on early dating situation it appeared that submissiveness in the son did not prejudice his relations with girls if the parents encouraged him to engage in dating activities.

It appears that those with marked career drives have lower degrees of courtship behavior, lower appearance, and greater "neuroticism." Those with good appearance date with more girls and more frequently but do not register higher degrees of courtship behavior. They report lower degrees of "neuroticism."

The wish to be married correlates highly with degree of courtship behavior. The most marked differences between them is that the former correlates highly with wish to have children while the latter does not. Those who wish to have children are higher in economic and social status.

Age is positively correlated with degree of courtship behavior. It appears, moreover, that the older subjects are emotionally more emancipated from their parents and more critical of their parents' marital happiness.

In conclusion, degree of courtship behavior correlated positively and significantly with favorability of early dating situation, wish to be married, and age; a significant negative correlation was noted with career drive. Positive correlations of marginal significance emerged from the consideration of parents' marital happiness, obligations, economic and social status. Those variables which did not produce even marginally significant correlations with degree of courtship behavior are: wish to have children, appearance, size of college attended, and sex ratio of the student body at the college.

DISCUSSION

by

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Although research workers have often speculated on the possibility of using quantitative methods to test the validity of psychoanalytic theories, few have undertaken such studies. Would the findings be sufficiently conclusive to justify the prodigious amount of labor required to develop and apply measuring instruments

²³ A future article will show how this bipolar family type may be broken into two bipolar types by the process of multiple factor analysis.

and techniques appropriate to such research? If the results should happen to be in harmony with psychoanalytic theory, could not the research worker be accused of belaboring the obvious, of demonstrating nothing not already well known to the psychoanalyst? If the findings appeared disharmonious with psychoanalytic theory, could there not be the charge that the research worker had interpreted them incorrectly, or had failed to comprehend the elementary premise that overt behavior often conceals more than it reveals of underlying motivation?

Neither Winch's findings in this paper nor in his earlier report lend support to the thesis that there is a close relationship between courtship behavior and love or hostility toward either parent. Instead of lending support to the psychoanalytic theory that love of the son for the mother tends to be accompanied by hostility toward the father, the findings indicate that love or hostility toward either parent tends to be accompanied by parallel feelings toward the other parent. Granting that the outcomes of this single study are inconclusive as a test of the validity of psychoanalytic hypotheses, the author is to be commended on having undertaken an investigation yielding data relevant to these hypotheses.

Since the emphasis in Winch's present paper has been upon findings relating degree of courtship behavior to social and psychological background factors, the results can be evaluated primarily within the framework of socio-psychological and statistical theory. It is interesting that these findings are so largely in accord with what would have been anticipated, had one postulated that culturally-contained family types operate as determinants of courtship behavior. The author's disavowal that such a postulate was made at the outset of the study strengthens the confidence one can place in the validity of the pattern evident in his findings.

Are the findings in the study reliable? Examination of the table of correlation coefficients reveals that most of these values are not statistically significant, and that the significant coefficients are for the most part low. This being the case, would it be possible to dismiss the findings as fortuitous, since in any large body of statistical values, some will by chance exceed the .01 level of significance? Of the 303 different correlation coefficients in the table (some appear twice), 98 are statistically significant at the .01 level. If chance alone were operating, we would expect to find not more than

three or four coefficients exceeding the .01 level. The odds against obtaining as many statistically significant coefficients as 98 are not a mere 33 to 1, but more nearly 33 carried to the 33rd power to 1, a probability so very great that we can be quite confident that Winch's table represents more than chance associations.

That so many significant coefficients do appear in this study is in part a consequence of a wise decision made early in the study to obtain a relatively large number of cases on which to base these calculations. The most frequent reason for inability to find many statistically reliable findings in sociological studies appears not to be the lack of precision in measuring instruments nor a lack of true relationships in the universe under investigation, but a failure to base these studies upon a large enough number of cases to permit non-chance relationships to be recognized as such. If the present coefficients in Winch's table had rested not upon 415 cases, but upon 100 cases, a number not uncommon in sociological studies, only 35 of the 98 coefficients now appearing as reliable would have passed the test of statistical significance at the .01 level.

Are the findings in the study valid? The answer to this question must rest upon multiple criteria of judgment. Are the results internally consistent? Are they in accord with external criteria as, for example, with the findings in other studies or with the judgments of experts resting upon non-quantitative observations? Is there evidence that verbal reactions are more than verbalisms? Let us consider the first test—that of internal consistency. Whether or not findings are deemed to be internally consistent is an act of judgment resting upon logical reasoning of the type "If A is correlated with B and C, then B and C should also show a significant correlation with each other." When based upon zero-order correlation coefficients, such reasoning is of limited utility in judging the extent to which findings are valid. Consider, for example, an apparent inconsistency in Winch's table, if we rely solely upon zero-order coefficients. Wish to be married yields its highest correlation coefficient (.62) against present degree of courtship behavior. This wish yields its second highest coefficient (.52) against wish to have children. Since both of these coefficients are highly significant, one might anticipate that present degree of courtship behavior would be correlated significantly with wish to have children. The correlation coefficient is only .06, not

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statistically significant. Holding constant the wish to be married, there is a significant negative coefficient (-.39) between present degree of courtship behavior and wish to have children. These findings might be regarded as reasonable, if we consider that among men who become involved in an advanced stage of courtship behavior, there is a substantial proportion who have no immediate wish to be married, and that for these men the wish for parenthood is likely to be even less marked. It is suggested that a re-examination of the data would reveal that men involved in an advanced degree of courtship behavior who indicate a lack of desire for marriage have reported an even less marked desire to have children.

When correlation coefficients are computed between variables, all of which represent verbal responses, there is the possibility that results may appear internally consistent without being valid. This might be the case, for example, if the errors of measurement are not random but are correlated yielding a kind of "halo" effect extending across the entire set of verbal responses for a subject. There is the possibility that a questionnaire of this kind may take on the aspect of a personality inventory measuring some generalized trait such as willingness to reveal private affairs to others, even though this be done anonymously. Or the generalized trait might be a desire to conform to what it

is socially approved, a trait that might warp responses in a constant direction.

Our confidence that these findings represent more than correlated errors is likely to be sustained, if there are some external checks on the validity of the verbal responses. It will be recalled that Winch reported a correlation coefficient between his ratings of the personal appearance of his University of Chicago subjects against their self-ratings on personal appearance of .54, a surprisingly high coefficient when one recalls the conditions under which the ratings were made, and the fact that they represent the judgment of a single rater, subject to errors of observation and of judgment. Age of the subject, size of school, and sex-ratio of the school are other variables that take on the nature of external checks upon validity, since they yield significant correlation coefficients with responses that might be subject to correlated errors of measurement.

Altogether, this study gives evidence of carefully thought-out experimental design, competent workmanship, and an adequate recognition of the inherent limitations of the findings. In the reviewer's opinion, it represents a significant contribution to the literature on social measurement and to our knowledge of the dynamics of courtship behavior in contemporary society.

EDITORIAL ANNOUNCEMENT

THE APPEARANCE of this issue of the *American Sociological Review* concludes the editorial responsibilities of the present editors. In the future all materials should be sent to the new editors (Dr. Robert C. Angell, *Editor*; Dr. Lowell J. Carr, *Book Review Editor*) at the following address: 115 Haven Hall, University of Michigan, Ann Arbor, Michigan.

SOME IMPLICATIONS FROM OUR PRESENT KNOWLEDGE CONCERNING PREJUDICE*

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AS THE title of this paper implies, we shall here be attempting only some interpretations and applications of present knowledge.

I

At the very least, "prejudice" means a pre-judgment, whether unfavorable or favorable, or even a pre-judgment of equality. Yet, because of humanitarian sentiment, reaction against quite absurd racial claims, and fear lest *any* admission of differences be misinterpreted, there is a strong compulsion to have findings come out only on the exact dotted line of equal national, class, and racial abilities. This is certainly contrary to expectations, since every measurable trait shows group differences. The more precise truth is: (1) that races probably do differ in innate ability, though how is not yet clear; (2) those at the upper levels of socio-economic status have higher abilities on the average than those at lower levels; (3) As of this moment, the repressed minorities, religions, classes, and races do have in fact many of the shortcomings they are charged with having (mediocre ability, shiftlessness, bitterness, compensatory aggressiveness, clannishness, etc.).

Further facts yield a further precision, however: (1) group differences are always differences of degree, never of kind; (2) the differences are slight and on the average; (3) the overlappings far outweigh the differences in significance; (4) the traits are less significant than they are made out to be; (5) some individuals do not show them at all; (6) some even develop compensatory virtues. (7) many of the traits are not

innate as such; and (8) prejudice has itself caused many of them. Hence the "engineering" of either social efficiency or social justice requires that education, social status, admission to vocations and professions, and extent of political participation be on the basis of individual merit. Prejudice, like friction in mechanical engineering, should be done away with as far as possible.

But that these groups do have these traits more or less embedded in their personality make-up and interbuttressed into their sub-cultural heritage is a factor to be reckoned with in attempting to change them, to change the attitudes of prejudiced people toward them, or to alter the pattern of their adjustment into the larger society. One will change none of these by only developing a counter-myth.

A science-sponsored myth is a contradiction in terms. As we have elsewhere shown, not only can a meaningful and efficient societal organization be worked out without recourse to reason-opposing fictions, myths, and legends; the contained strains of an increasingly secularized society will steadily force the basing of moralities, statuses, and institutions on the *precise* functional realities.¹ Until that is accomplished, the accommodative process will *necessarily* be one of myth and counter-myth, faith and counter-faith, ideology and utopia, prejudice and counter-prejudice.

The *precise* truth of science is the most insidious and irreversible long-run corrective of this. Science thus functions in society as the reality principle does within the personality. It steadily modifies the exaggerations and distortions of the warring segments,

¹ See James W. Woodard, "The Role of Fictions in Cultural Organization," *Transactions of the New York Academy of Science*, Ser. II, VI, 8, 311-344.

* Paper delivered at the annual meetings of the American Sociological Society, Cleveland, March 3, 1946.

absorbing them into itself and working slowly toward a true, total integration.

Nor will it do, any more than in individual therapy, to level an accusing finger at the vicious and ugly characteristics of the dominant segment in turn. Science must analyze and diagnose until it reaches the more fundamental impersonal forces and until it has set segmental strivings in the clear perspective of total-functional workabilities.

The role of the functional scientist relative to society is thus like that of the clinical diagnostician or the psychoanalyst. He is neither for nor against one segment or another. But he *is* for the best adjustment of the organism-as-a-whole. This, in turn, is not in terms of any extraneously imposed criterion of adjustment, but in accordance with the organism's (or personality's, or society's) own "contained" criteria—i.e., the alternatives of workability possible, given the needs, resources, and functional processes at play within its total field of forces.

To supplement the completely detached description possible in the inorganic sciences, the functional scientist must thus develop the highly disciplined, but *concerned* and *instrumental* objectivity of the functional diagnostician. He must make a searching functional diagnosis of our prejudices and our ideals, our family morality and our religious beliefs, our class and caste systems, our political forms and national sovereignties, and our chaotic class ferment and decrepit economic institutions.

For the chaos, intellectual confusion, emotional unrest, disorganization, and culture lag which characterize our society in this period of rapid transition result only in part from a lag between science (and its technology) and non-science (tradition, prejudice, mores, and institutions). They result in part from a lag between the non-functional (inorganic) sciences and the functional sciences; notably between physics and chemistry on the one hand and biology, psychology, psychiatry, sociology, economics, and political science on the other.² Only a prodigious development

in these latter sciences (and their technologies) can hold in bounds what will otherwise be an acceleratively aggravated lag, with confusion and prejudice compounded. But a disciplined and incisive integrity of description and diagnosis will provide a firm basis on which appropriate institutions and their supporting attitudes may be built, even in the individuated and secularized society of the future.

We will need to shift the emphasis all up and down our educational systems to the human-social sciences. More of these sciences must be included in the curricula of all students, at all levels. And a major training in the whole cluster of human-social sciences must be made "required curriculum" for all "stellar points" in social control: ministers, teachers, journalists, doctors, lawyers, personnel managers, social workers, labor leaders, and "top management" in business, industry, and finance. Professional and pre-professional curricula must undergo drastic revision to this end, if we are to win what H. G. Wells called the race between education and catastrophe. It is to these areas that the major part of those two billion dollar research funds must be directed; especially to those fields (such as social psychiatry) which can hasten the development of the functional approach and its validating disciplines.

Our first suggestions for a long-run handling of prejudice and also for its whole cluster of related problems, then, are: (1) full scientific precision in handling the data of controverted areas; (2) a prodigious pushing of research in all human-social areas; (3) a greater extension of education in these disciplines; and especially (4) to the potential keypoints in leadership and social control. These measures will be most effective if (5) the functional sciences recognize their functional character and develop the

308; "A New Classification of Culture and a Restatement of the Culture Lag Theory," *Amer. Soc. Rev.*, I, 1, 80-102; "Notes on the Nature of Sociology as a Science," *Social Forces*, XI, 1, 28-43; and pages 247 to 264 of "Social Psychology," being Chap. IX in *Twentieth Century Sociology*, Georges Gurvitch and Wilbert Moore, eds., N.Y., 1945.

² See James W. Woodard, "Critical Notes on the Culture Lag Concept," *Social Forces*, XII, 3, 388-

subtle disciplines and skills which their character calls for. It will be a major turning point in cultural evolution, outstripping both the Industrial Revolution and the emerging Atomic Revolution, when society once abundantly instruments such strategic measures.

In attempting to handle prejudice scientifically, we must, then, accept the *natural order* legitimacy of its occurrence, characteristics, and effects; somewhat as the physical engineer does with friction or a clinician does with a symptom. For tendencies to prejudice are integral to human-social functioning. They appear at the level of perceptual organization, personality organization, cultural organization, social organization, and interpersonal and inter-group competition and conflict. The function of prejudice at each of these levels is to maintain the functioning integrity of the functioning unit or segment.

Drastic implications flow from this. Until the unit of organization and action is enlarged, the segments necessarily fight each other. Until we succeed in integrating our economic institutions on a total-welfare basis, segmental class conflicts and their supporting prejudices *cannot* die down. Until nations are secure within an overintegration, they *must* develop grandiose national biases. Even if there is an overarching organization, the conflicting interests of the segments will still offer trouble enough. But if there is *no* total organization (and if sacred loyalties taboo even trying to achieve it), then getting rid of the biases displayed by the segments will be next to impossible. This is the challenge facing all those institutions seeking universally valid truth and value: science, the arts, the humanities, ethics, and religion. These are in an intolerable position in our present world, pressured as they are into witting and unwitting sanctioning of conflict-tribalisms which belie the universal meanings and values which are their own essence and to which they can only pay an unctuous lip-service. For the emotionalized distortions and ruthless enemy-moralities developed by uncoordinated segments are the very stuff of competition and survival.

That is why it is sound strategy to get Negroes into labor unions. Then the lines of

racial and economic interest criss-cross and integrate, rather than demark and alienate. The same would be true if both the workmen and the chambers of commerce of the world were free to unite. For *it is the unit of functioning which integrates*. The implications of this principle for collectivism and for global government deserve careful consideration. So do the implications of collectivism and global government in turn for war and class war, and for class, racial, and nationalistic prejudice.

II

At the level of intellectual functioning, integral tendencies to prejudice are seen in the ubiquity of mental habits, reification, stereotyping, and the Gestalt or pre-perceptual pattern. The perceptual pattern, even as a sub-unit of functional integration, selects, rejects, and distorts sense stimuli in such a way as to maintain its own integrity. For most of our mental functioning, we "define first, then see." That is precisely what prejudice also does.

These rigid thought patterns produce very important economies in the thought process. Without them, intelligence could not function at all, in spite of the fact that in turn they hinder higher levels of intelligent functioning. That might seem to make lessening the tendency to preconception a hopeless task. But such is not the case. As we come up the animal scale, better adaptation of species results as the iron-clad rigidities of tropisms and reflexes are replaced by the relative plasticities of habit and as even more flexible intelligence gains an entering wedge. This reaches its peak in man. But it continues, within man, as we come up the scale of the I.Q. level, the cultural level, and the educational level.

For the untutored, as for the feeble-minded, most of life is necessarily screened through a few simple preconceptions. For them, most adjustments, too, are necessarily processed out emotionally rather than intellectually. This too is the way of prejudice. The same tendencies mark peoples of a low level of cultural development, in spite of our current skepticism of Levy-Bruhl. And they

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are equally inescapable in very young children, as Piaget has abundantly shown.

We do not mean that prejudice correlates ± 1 . with education, I.Q., or the cultural level of the group; for other factors are also involved. But it is no accident that prejudice most abounds in those regions of the country where educational facilities are most neglected, and among those socio-economic levels which have least access to education. Steadily raising the level of a universally accessible education would have great long-run value in minimizing prejudice. So would research, highways, telephones, radios, newspapers, libraries, etc.; anything which advances the group's general cultural level. And so would eugenics.

High ability highly educated may only result in a more elaborate and brilliant rationalization of prejudices emotionally held or culturally transmitted. But in a total population of high ability and training, adeptness in debunking is equally advanced. In such a population, the contained strain toward reasonable and appropriate adjustment would be tremendous. By contrast, quite simple analyses, say those of the Institute for Propaganda Analysis, are beyond comprehending application on the part of many in our population. Whole levels of our population cannot really go beyond sixth grade.

It is both the untutored and those of poor native ability who are the most susceptible to stereotyped thinking, crowd psychology, propaganda, and prejudice. They accept with little analysis the myths, legends, and fictions which support obsolescent social forms on the one hand or which hold out false revolutionary hopes on the other. By gullibly following demagogic leaders, they invite the manipulation and political exploitation of their own weaknesses. The whole process of social adjustment and social change is thus set in the climate of prejudice and counter-prejudice, propaganda and crude counter-propaganda.

The growth of prejudice and its manipulation through propaganda have paralleled the growth of democracy and the extension of political power to the mass man in the west-

ern world. A more refined democracy, more appropriately modified by its technocratic elite and by contained reasonableness, would be possible if eugenics were coupled with universal education to yield a genuinely intelligent population mass. The resulting beneficent circularities would carry social and cultural adjustment to new levels. But the problems of a global tomorrow, full of endless relativities and complexities, cannot be smoothly solved by stupid populational masses and demagogic leaders manipulating prejudice as the folk-weapon of combat.

Any program based on the solid rock of individual differences will steadily undermine the whole group-prejudice psychology. Thus, while prejudice blocks the adoption of such measures as eugenics, the FEPC, and the extension of educational, vocational, and professional opportunities on the basis of individual capacities, the more we do succeed in effectivizing such measures, the more the underlying psychology and expectancy is slowly changed. All the contained imperatives of an increasingly complex secularized society augment this tendency. When the traffic light is green, all may go; when it is red, all must stop; be they black or white. Who has the purchase price may buy at the store; others may not; be they Protestant, Catholic, or Jew. Science, *completely* impersonal and deracinated, steadily absorbs more and more of the culture into itself. Individuation increasingly challenges the old myth-based reifications of status. The contained logic of education, vocational guidance, industrial personnel placement, civil service, and workable political policy; all these tend toward diminishing group discrimination, toward selecting in terms of individual abilities. Status is awarded, increasingly, in accordance with the resulting functional role. This reverses the ancient principle of restricting role in terms of traditionally accorded status. One can know, when he espouses such measures, that the deep, irreversible historical forces are pushing that way too.

But there is one application of the curve of individual differences which we have never made. White supremacy was based on the

fiction of important racial superiorities. Science demolished that fiction. The rule of the nobility was based on the fiction of great, even qualitative, superiorities. Science demolished that fiction. A political democracy in which numerical majorities control and in which all have an equal ballot is based on the fiction of equivalent competence, enlightenment, and social motivation. That is straight in the face of the scientific findings. Wide individual differences along a normal distribution curve characterize all these things.

In our own democracy, for example, a person may be so stupid that he is barely out of a feeble-minded institution; so uninformed that he has never even learned to read and write and has neither interests nor knowledge beyond naïve personal and local affairs; so eccentric that he is barely out of an insane asylum; so poorly provided with breadth of experience, character reliability, or technical equipment that only the crudest tasks under constant supervision can be entrusted to him; so irresponsible or definitely anti-social that he is barely out of jail; and a person may be any one or all of these. We still give his ballot the same weight which we give to the most intelligent, informed, highly equipped, and nobly motivated persons in our society. At the same time, we have a blind spot to the extent to which this causes the manipulation of prejudice as a status-defining instrument. By corruption, machine politics, and demagoguery, the few still control the many, just as they have in every society in history.

Now, I do not suggest turning over control to an upper segment. I do suggest a progressive weighting of ballots as one goes up a many-intervalled scale. Both eugenics and universal education, however, must keep pressing the total populational mass into the top intervals of that scale. Then they will *legitimately* have full and equal political power. For democracy is not merely to be embraced in hollow forms that mock its essence. It has to be engineered into being, and constructed into a genuine, working reality.

I do not here suggest by what combina-

tion of clinical measurement, educational and vocational record, and personal history the appraisals could be made. I do suggest that science is steadily becoming better equipped to make them. It does so daily in equally vital areas, such as educational placement, vocational guidance, job analysis, industrial placement, parole and marital prediction, personality testing, personality readjustment, and many others. Carry these skills to the further perfection which time will confer; add a similar selection and weighting of political participations; and you have arrived at the only true "classless" society. It has gradients of control and status; as it necessarily must. But these are reality-based, functionally appropriate, and ethically unassailable. *They involve no spurious myths to support them.* Societal evolution will not rest until all our behaviors and institutions are based on such precise realities.

The gradualisms and relative weights involved in this proposal might permit the South to make initially modest but steadily incrementing and genuine extensions of political power to the Negro. The same might be achieved for native colonial peoples. The resistance of dominant groups to such extensions of political power is augmented by legitimate fears, when they are faced by only an immediate, all-or-none alternative.

Historically, prejudice has increased proportionately to the insecurities and unpredictabilities of status. Under the conditions which we have sketched, status would again become both predictable and secure. This would not be within a new caste system, rigid and myth-supported. It would be within a flexible, provably appropriate, and understandable framework. Prejudice, as a folk-weapon for status definition, could then die down, no longer having a group function.

The prejudices involved in the class struggle and in the revolutions incidental to social change would also be alleviated, though they could never be completely obviated. Social realignment would no longer be carried on between intelligent and educated upper groups pitted against stupid, uninformed, and thereby the more grimly emotionalized

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under-groups. Change would occur more and more through the interaction of the intelligent and informed elements *within all* the various groups: classes, races, religious, regions, and nations.

These advantages would be further clinched if one of our houses of Congress were made functional in character (ownership, management, labor, agriculture, education, consumers, science, the professions, etc.) to supplement the geographic representation in the other. Geographic representation, alone, pressures into an overemphasis on local interests and local prejudices (Bilbo) at the expense of the wider national interest. And its hodge-podge constituency, while permitting some genuinely integrative influence on the part of a statesman, more often produces the least-common-denominator demagoguery of the politician. By functional representation, functional interests would have a legitimate "lobby," which they do not now have, lessening the corrupt machine aspects of politics. Functional representatives would have more technical expertness in the specializations of functioning which they represented. So would the voters to whom they would be responsible. This would implicitly provide a needed modification of the sheer democratic principle by the technocratic principle—representation of functional areas by those experienced and expert in those areas.

The two houses, together with the spatial and social-level scattering of their constituencies, would criss-cross, offset, and supplement each other in a very pervasive pattern. The repercussions which would ensue would force the mere politician to a more statesmanlike and integrative functioning. It would reduce the gains possible by mere demagoguery and prejudice manipulation.

If both the weighted ballot and some functional representation were adopted, problems would then be found to be no less frequent and full of strains than before! But the intelligent and the informed would be given more direct representation and a greater balance of power in solving them. The atmosphere in which problems are approached thus steadily alters from one of

demagogic propaganda to a climate more favorable to informed and intelligent solution. The whole political process is stepped up to new levels. *Adaptability* replaces the clinching of a specific adaptation, say that status quo which either you or I may prefer.

The inconsistencies and sudden reversals of a fickle mass opinion; the bewilderment of masses void of frames of reference and unaware of the limitations placed on the means of instrumenting policies; these would be lessened. So would the pendulum swings of emotionalized over-action and subsequent counter-action which have historically characterized mass revolution as a realigning instrument. It is the aggressions of conglomerate masses that are most easily displaced to scapegoats. They are most readily misled into blind alleys. Conflict feeds on conflict.

The classic pattern in which realignment of political power has historically occurred is as follows: social-cultural changes, often technological and involving new modes of production, produce new classes or realign the relative positions of dominance and power among former classes. Institutional structures, perhaps especially the political structures, resist these realignments. The opposing sides gather forces and fight it out. A decision is reached, and the new alignment maintains for a while. Then the cycle repeats. Often this takes the form of the next-to-the-top group either displacing or coming to share power with the top group in the social pyramid. Thus the sequence in European affairs: clergy, nobility, landholders, merchants, industrialists, finance-capitalists, etc.

Each of these revolutions, while thus in a sense only "palace revolutions," must gain the support of strata lower than themselves in the social pyramid and, in some measure, the support of the mass of the society, in order to revolt successfully. When some critical breakdown of the old order impinges, discontent is widespread enough to permit this. It is done, without necessarily conscious hypocrisy, in terms of slogans and ideal principles which not only express the grievances of those "nearly-ins" near the apex of the pyramid of control, but also ex-

press the yearnings of *all* the "outs," the subordinate strata and the general masses. These are the slogans of "justice," "equality," "liberty," "fraternity," "democracy," and so forth. In terms of them, the general mass comes to support the revolution, throws up a more radical leadership, or carries the impetus of affairs beyond the point necessary to settle the "palace" conflict or to satisfy the aims of the initial spear-heading group. Perhaps changes in the control structure are carried beyond those rendered imperative, or even made possible, by the point reached in the underlying technological-economic-social-cultural changes.

"The last revolution has been won." "Utopia is at hand!" But the new order is confronted with bewildering complexities. Those in the stellar points in the new gradient of social control lack the necessary prestige, know-how, and other necessary equipment. They have discarded too much of the old order that was still workable and necessary. They have adopted too much new that is unworkable, Utopian, and arbitrary. The emotionalized mass movement has overshot the mark. The new order lacks historical viability in the light of all the forces at play. It begins to sag and cave in.

The counter-revolution sets in. The initial spear-heading next-topmost strata now comes into its own. The revolutionary masses, disillusioned, nurse their hostilities against their next time of opportunity. They develop the grandiose self-righteousness and enemy-morality toward their oppressors which characterize the compensations of the defeated. This takes on the intensity of a religious faith. Meanwhile the now-reactionary displaced class and the increasingly conservative newly-admitted class tend to rejoin hands. They build up a grandiose and self-righteous ideology and enemy-morality in their turn. This is over-drawn and overstated in defensive fear of the extremes of the suppressed strata. Self-righteousness, bitter prejudice, and ruthless strategies become their weapons. The two groups interact to exaggerate their opposite systems of prejudice and rationalization, and to broaden the gap between them. This happens in the same

way in which opposite phases of ambivalent meaning in the individual personality (caught in a vicious process of compartmentalization, repression, and defensive reaction-formation) lead to dissociation of the personality. The ground is already laid for the next revolution.

The action is cyclical and highly irregular, but with an obscure "contained" direction. In the long sweep of the history of advanced cultures, further and further next-successive strata, downward from the apex of the social pyramid, are included in a share of social power. Also in the long sweep, tremendous vitality, faith, and righteousness-of-conviction are conferred upon the "Causes" of "justice," "democracy," "equality," and the like. The longest-run contained trend is in the direction, at least, of control by the total society over its own destiny. But at what cost of starts and stops, disillusionment, compensatory grandiosities, overshooting of the mark, revolution, counter-revolution, blood, and conflict!

The violence of these pendulum-swings is caused by the failure of a permanent but flexible synthesis between: (a) the dominant power groups (often an artificial "aristoi"); (b) the emerging power groups (presently also seen as an arbitrary "aristoi"); (c) those of high intelligence and background (the real or natural "aristoi"); (d) the technically expert (also a reality-based elite); and (e) the human, democratic mass. The historical process will continue to be full of devious subterfuges, corruption, class prejudice, and violence as long as political institutions are based in principle on only one of these indispensable sub-groups, with defensive myths against according legitimate functional roles to the others. The synthesis of the aristocratic, technocratic, and democratic principles may or may not take the forms here suggested. But a synthesis will ultimately be necessary if a solid political integration, but one that is also flexible for further historic adjustments, is to be achieved.

Anger, hate, and rebellion are proportional to the contrast between expectancies and eventualities. The gross over-expecta-

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tions of the vested interest groups, the fiction of equality, the fictions of our over-competitive system, the least-common-denominator myths of conglomerate political manipulation, the myths supporting the past and future revolutionary Utopias; all these over-promise, disillusion, and eventually over-embitter. It were better if the more modest initial expectancies of pooled expert judgments were followed by more genuine and constantly expanding realizations. For an underlying process that is really liberative in its long-run trend has thus far not only been historically more and more violent. It will become still more violent, bitter, and full of bloodshed in the future, in a more and more individuated, but also a more and more disillusioned and embittered age. That is, it will do so if our social fictions promise too much; if social realities deliver too little.

But social conflict is amenable to handling after the fashion in which personality conflict is handled in the individual. If the expectancies of the opposing segments are so modified by the reality principle that they are not over-great and unrealistic; if the disillusionments are thus few and the defeats mild; if all the criss-crossing sets of values can be given expression and made to modify out their puristic grimness on a common plane of rational analysis and appropriateness; if meanings can be defined in the perspective of the total field of forces and meanings involved; then the grandiosities and hostilities of the segments in conflict can strip off their compensatory and defensive exaggerations. This makes it mutually possible to do so further. Presently, dissociative vicious circles are replaced by beneficent circles. Constructive processes begin to produce the integration of the personality; or of the society as a whole. While the processes of history can never be completely without friction, it is thus possible both to smooth them and to insure appropriateness of outcome and direction.

III

Just as tendencies to preconception are integral to intellectual functioning, so tendencies to emotionalized prejudice are

integral to the processes of personality organization. The practical measures indicated by this fact are further research into and further and still further extension of the applications of social psychiatry. This is at the very crux of the problem. Prejudice is often only a displacement of the repressed aggressions, anxieties, insecurities, loves, and hates that infest a warped individual personality. If the individual personality were straightened out, it would not need the social scapegoats. But distorted attitudes, when shared by many, achieve a folk expression and a cultural buttressing. This provides socially sanctioned release for personal complexes against the traditional rivals, enemies, and scapegoats of the tribe, thereby achieving catharsis for the individual and at the same time solidarity for the in-group of which he is a member. Social psychiatry's attack on prejudice must thus look both to the readjustment of individual neurosis and also to the realignment of the social-cultural organization which, as we now know, importantly shapes or mis-shapes the individual personality. An emotionally mature personality and an emotionally mature culture are thus interdependent. Our earlier proposal for special training for "stellar points" in social control applies here, too. An emotionally mature populational mass, with emotionally mature leaders, would not only have few prejudices; it would make even drastic institutional and moretic changes with reasonable smoothness.

There is an "economy of the personality" in which emotions and drives select among stimuli on the one hand and inhibit or canalize responses on the other. This presently results in the structuration of the personality as a going *system of workabilities*. Items antithetical to the system of workability thus established are inhibited, segmented off, or if necessary repressed altogether. The process is the very stuff of personality-formation and functioning. Thus the structuralizing of personality may be said to be achieved in part (i.e., in all aspects except those in which the reality principle has obtained) by the fabrication of a battery of mutually interbuttressing private (favorable) prejudices into

a system of workabilities at the level of the conscious self. This system then defends itself by erecting barricades of private (hostile) prejudices against items that would disturb it.

The complex further repercussions are the very stuff of prejudice: distortions, frustrations, aggressions, anxieties, scapegoat displacements, compensations, projections, protective blind spots, logic-proof rationalizations, and so on.

Anything so integral will not be removed by scolding it. It was not until the psychoanalytic contribution that we were able to confer natural order legitimacy on these distorting and maladjustive processes. We will be wise when we can view prejudice, maladjustive as it is, in these terms too and quit merely denouncing it. Given the clinical picture, it may have a function, may even be needed.

Prejudice being seen as due to wrong attitudes, solution is too often seen as a simple matter of changing those attitudes. But we do not really have such free-will choices about our own attitudes. Denunciation is often enough only attacking symptoms. The prejudice resists reason, builds up its defenses the more elaborately under attack, and may actually increase in strength under our moral indictment of it. There was never a time when so many sermons, editorials, and other direct attacks on prejudice were being made than at present. Yet prejudice is rising steadily.

There are more effective ways. The indirectness of suggestion, for one. For another, the mutual confidence and understanding promoted by sitting down together (in arbitration, conciliation, interracial committees, and fellowship groups), and by all forms of cooperatively working together. Other measures could remove underlying causes, and thus reduce the need for prejudice. The release from frustration and anxiety which sixty million jobs would provide; the diminution in grimness and the sharpness of in-group lines which would follow an FEPC's steady criss-crossing of interest groups; the release from basic anxieties which a cradle-to-the-grave security would

provide; release from the recurring periods of depression and unemployment which plague the capitalistic system; these would do more to diminish prejudice than all our sermons and editorials. Something is gained, too, by every successful lessening of the excessive expectancies, stakes, and powers of the vested interest groups, who are thereby motivated to calculated manipulation of prejudice. To be sure, prejudice blocks these measures in turn, precisely as do resistances in the clinical patient. But in both cases, success makes for further success and slowly works out a constructive integration.

Too direct an attack, however, just as with the hysterical symptom, sometimes only aggravates prejudice. Any practising psychiatrist will tell you that to lay bare, even factually let alone accusingly, the true logic and motivation which underly the consciously-held system of rationalizations and defenses is a very disturbing, disorganizing, even explosive thing. The patient must realize them for himself, a step at a time, as he becomes ready for it.³ He will have his own resistances to overcome even when he is convinced of his maladjustment and is actively trying to change himself. That is why both individuals and peoples, when cornered in the illogic and injustice of their prejudices, do not then acquiesce and alter them. They lose their tempers. They fight back with a grim hate warranted by the fact that their very integrity and way of life are jeopardized.

It is for these reasons that the moral attitude breaks down as an instrument for human engineering. In the moral approach lies alienation not reconciliation, dissociation not integration. Personal enmities, class con-

³ A correct therapeutic principle, as far as it goes, is thus innocently embraced by those "pure" scientists who have no interest in "values," even in inductive appraisals of functional appropriateness. We do not here refer to the vociferous and argumentative objectivists, but to those who matter-of-factly carry out their quite impersonal analyses of the natural phenomena of their field. The findings seep slowly into the general society thinking. The group assimilates implications for itself, a step at a time, as it is ready for them. The end result is solid rock, quite unshakable.

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flit, race conflict and war follow from the grandiose indictments of the moral approach. A more impersonal and deeper understanding and a more adroit engineering and therapy are required for the constructive assimilation of our modern fractured societies.

As the inductive culture absorbs more and more of the control culture and the scientific climate pervades more and more of our total life, such constructive methods become more available. This is evident in our smoother, less punitive, and more understanding and creative handling of the delinquent, the school child, the industrial worker, the case work client, and the maladjusted personality. Social psychiatry will need to contribute a similar a-moral detachment and a similar diagnostic and therapeutic finesse in solving such knotty problems as prejudice, class struggle, and war.

When the psychoanalyst quits attacking the symptom and works with the meaning-giving context until the total field is realigned, the symptom presently disappears of itself. One of the important strides in all medicine came with the recognition of an actual function for the symptom itself. Doctors now sometimes induce a fever. The function of the neurotic symptom may be only accommodative, even vicious and blocking to a full adjustment. But it is still *needed* within the given clinical picture. So it is with social problems. They persist until real changes are made in the total complex of conditions that gives rise to them.

We must engineer a lasting freedom from insecurity and a genuine achievement of communal interests, giving body to our over-protested verbalizations of brotherly identification. It is no accident that the cluster of prejudices that most beset us occur but little in collectivistic Russia (though she has some obstreperous ones of her own). We must develop more channels for common interests to express themselves, and provide equitable, orderly, and effective modes of processing out irreducible conflicts. Then prejudice, no longer needed for tension release or as a folk weapon of in-group solidarity can disappear.

Thus the problem of changing attitudes, as a problem for applied social psychology,

requires for its full solution the pooling of the resources of social psychology, psychiatry, economics, political science, etc., to change appropriately the total complex of their determination. More and more, this demands that we work out an integral human-social theory to underlie our academic compartmentalizations and to give sure-footedness, manifold angles of attack, and strategic perspective in dealing with all human-social problems.

IV

Tendencies to prejudice are integral to cultural and to social organization in precisely the same sense as they are to perceptual and to personality organization. The content of prejudice is determined by the center of reference of the functioning unit. And the function is to maintain the integrity of the functioning unit, the given group, its *cultura qua*, and its *status quo*. The folk function of prejudice is thus, in part, precisely what the prejudiced person says it is: to keep those so-and-so's in their place. For cultures and societies, too, are *systems of workabilities*. They define good and bad taste, right and wrong, and sense and nonsense in terms of the workabilities of their given system. They always reify them,⁴ however, as absolutes. They provide pre-perceptual patterns for their members which stand as screens between them and reality. Through these screens experience is always filtered. They erect highly emotionalized resistances against the admission of items that would disturb, disrupt, or undermine the system of fictions, myths, and rationalizations which underlie the system of behavioral workabilities.

In the control culture, this process begins with the mildly arbitrary "as ifs" of the usages, proceeds to the contrary-to-fact "as ifs" of the conventions, and reaches such vital importance at the level of the mores and institutions that the group requires that belief conform, as well as behavior.⁵ This is

⁴ See James W. Woodard, *Intellectual Realism and Culture Change*, Hanover, 1935.

⁵ See James W. Woodard, "The Role of Fictions in Cultural Organization," cited above.

required with equal sternness at the more vital levels of the social organization, with its fictions of status, loyalty, and social distance and their supporting ceremonies, rituals, rationalization systems, myths, and legends. Thus it is the myths, fictions, and intolerances of the authoritarian control culture and of the tradition-based social organization which are the major ultimate factors in compelling the individual personality to forsake the reality principle and to repress from consciousness items that are not compatible with itself as a going system of workabilities *within* the going system of workability of the socio-cultural organization.⁶

The ameliorative and eventually integrative role of the reality principle among these vitally entrenched systems of preconception is at once apparent. It is equally apparent that, however adroit individual psychoanalytic therapy may become, its task cannot stop until, as social psychiatry, it has joined forces with the other human-social sciences in reshaping the larger field of forces, with reference to which the individual is shaped in turn, released to rich realizations or broken on the wheel of the group requirements. It is almost equally evident that until very recently the control culture and social organization have been almost *entirely* myth-based and fictional. Necessarily, that has involved a proportionately dogmatic intolerance in the supporting attitudinal systems. It was, then, no idle whim when, a few pages back, we suggested a meticulous basing of our future behaviors and institutions on the *precise* scientific realities, outlandish as some of our suggestions may have seemed to our readers. If we can achieve this, numerous divisive and dissociative processes at all levels of personal and social functioning would be minimized and cooperative and integrative processes set in motion.

The Great Society of the present fractures into sub-groups: races, nations, classes, regions, religions, and ideological and economic blocs. Each of these is equipped with

a battery of rationalizations, loyalties, and prejudices. These support the morale of the in-group, give it solidarity, and provide a justification for its strategic offensive and defensive tactics. In an age of total war and undeclared psychological warfare, the aggravation of national prejudices will reach new heights, threatening civilization and science themselves; unless an overarching security robs them of their function. It will be pathetically futile to attempt to "preach" and "educate" Germany's aggravated and compensatory grandiosity out of existence. We must devise an over-arching United States of Europe or an over-arching global government. Then these defensive grandiosities can *safely* die down. Then Germans and Japs may be truly integrated into the common humanity.

No real machinery has been set up as yet to prevent war between the *big* powers. This means that the big powers will have to practice the constant alertness, espionage, intrigue, and psychological morale devices that modern total war implies. Russia is already doing this on an all-out basis. The rest will follow suit, aggravating a vicious circle. We will get a steady narrowing down into two powerful blocs; on the one side, the white, Christian, capitalistic, and empire powers; on the other, an alienated Russia, a disgruntled China, and a restive India, together with the rebellious colonial peoples of the world. This threatens a war with a billion or more population on each side; a political, ideological, racial, and religious war; a "holy war," fanatically fought with weapons of ultimate destructiveness.

But an over-arching integration *could* be achieved; and only such a superior sovereignty can prevent that war. The interests which now transcend sacred boundaries could then be given natural-order legitimacy, provided with channels of expression, woven into a wider unity, and criss-crossed into a healthy global political process. Conflicting interests could then work themselves out through political channels peacefully. Transcending common interests could be free to ally themselves into wider but criss-crossing solidarities. Virulent tribal prejudice, instead of being intensively cultivated as an instru-

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⁶ See James W. Woodard, "The Relation of Personality Structure to the Structure of Culture," *Amer. Soc. Rev.*, III, 5, 637-651.

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VI, 7, 313-3

ment of morale and psychological warfare, could die down. The over-arching security would presently rob it of its function. The larger common interests would presently integrate the warring segments.

Culture has been in existence at least half a million years. Changes at first came very slowly; then with ever-increasing rapidity. Hundreds of thousands of years at first, with scarce-perceptible changes. Tens of thousands of years and quite noticeable changes. Thousands of years and great changes. Hundreds of years and inconceivably vast changes. More change occurs in a decade now than in half a million years at the beginning of the process. The period of time between new cultural levels grows shorter and shorter. The changes to be encompassed grow greater and greater. The breathless pace of the last two generations will be slow motion compared with the next two. Basic reorientations and radical reorganizations, with split seconds in which to accomplish them, and with the very destiny of mankind in the balance—that will characterize the immediate future. There will be no time for leisurely acceptance of things-as-they-are; no place for fettered minds.⁷

The old frameworks of meaning, built on traditional and tribal belief systems, have gone or are fast disappearing in this chaotic transition period in world history. New frameworks of meaning, built on the universally valid findings of science, the implications of emerging power patterns, or on democratic-humanitarian consensus, only slowly emerge. Only a universally valid and self-validating wisdom can provide the necessary certitudes. We have to structure a new "system of workabilities" for the conditions of tomorrow and of the long future. Precisely appropriate and profoundly wise measures of heroic proportions must be effectivized in split-second margins if we are to turn catastrophe into benefit. Among such measures, we have noted the following;

Basic research in the human-social sciences. The development of the functional-

diagnostic disciplines in the social sciences too, as well as in medicine and psychiatry. A universally accessible education to yield the highest possible training of individual capacities. A eugenical program to raise the mass capacities for training, for new discovery, and for smooth adjustment. All social selection on the basis of individual merit: in education, vocational guidance, industrial placement, professional training, civil service, and political participation. A weighted ballot to promote intelligent adjustment in reaching either appropriate stabilities or appropriate changes. Political representation by human-use regions rather than by arbitrary, conglomerate, and non-descript geographical divisions. Supplementation of geographic representation by the criss-crossing technical competencies of functional representation. Some direct political representation for education, the sciences, the professions, and other relatively detached and deracinated expert disciplines. A prodigious pushing of research in, and a rapid extension of the applications of, social psychiatry. Good mental hygiene made as universally accessible as education and sound physical health. An especially ample provision for both the mental hygiene and a social-science-weighted education for the "stellar points" in the social control gradient. Changing the ethos of our times to one in which the scientific climate steadily replaces a myth-, legend-, and tradition-ridden control culture. A political criss-crossing of the patterns of conflicting interests (economic, racial, religious, class, cultural, national, regional, and global) to blur and meld the sharp lines of in-group identification and to take the puristic grimness out of intergroup adjustments. Basic economic cooperation to lessen the imperative pressure to conflict; basic economic securities to relieve frustrations and anxieties. Over-arching economic and political integrations to take the grimness out of class war and to render national warfare impossible. These are the steps which our generation must successfully negotiate, if we are to turn threatening global catastrophe into a vast civilizational gain.

These are bold measures. Some of them

⁷ See James W. Woodard, "Cultural Evolution and the Social Order," *Journal of Social Philosophy*, VI, 7, 313-326.

are as absurd on their surface and as recondite from tradition-ridden common-sense as the intricacies of atomic manipulation are from the preconceptions of a village mechanic. But if the present emergency can drive us to the wisdom of these heroic measures, we can build the Union of All Mankind. It is the unit of functioning which integrates!

The attempt, however, will be to freeze or further entrench the status quo among the power-wielding nations and classes. Conflict groups will manipulate race, religion, and national minorities. They will deliberately foster their prejudices as the British

have done in India, Palestine, and the Levant, as Bilbo and Rankin do in the South, and as Hitler did on the Continent. These prejudices are too potent weapons of folk conflict not to be deliberately fostered as combat weapons, not to have a virulent natural growth.

The problems of racial and religious understanding are thus inextricably involved in the problems of global organization, class conflict, and changing economic and political forms. Unless we solve these wider problems, their impact may cause all that is gained in earnest local and immediate endeavors to go by the boards.

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CURRENT ITEMS

COMMUNICATIONS AND OPINIONS

A WORD FOR SOCIOLOGY BY FORMER PRESIDENTS OF THE AMERICAN SOCIOLOGICAL SOCIETY

As part of the program for the Annual Dinner at the Cleveland meeting former President Vance, who presided, had requested all past presidents to prepare a one-sentence response to the challenge of the phrase: *A word for Sociology*. Past presidents in attendance at the meeting gave their responses in person. Those unable to attend were asked to "send the word to Garcia" by letter. These statements were then read by proxy. They offer an interesting commentary on Sociology in 1946 and seem worth preserving for the record.—The Editors

E. S. Bogardus: "Under the current turbulent conditions of group life, sociologists need to close ranks and to work together more consistently, and particularly to shift from atomistic pieces of research to co-operative research."

F. Stuart Chapin: "It is everywhere evident that the trained sociologist is now in demand for his expert knowledge that serves to clarify the problems of university administration, that contributes to the efficiency of state and federal departments which have responsibility for the formulation of programs of social action, that helps guide the steps in social planning in our urban and rural communities, and that is even now coming to be recognized in the field of industrial relations."

Charles A. Ellwood: "We need a sociology which will take into full account all the facts which affect human relations, whether they are in the external behavior and environment or in the mind of individuals, and which will not hesitate to draw scientific generalizations from these facts, or to tell groups how they must behave toward one another if they wish to further peace and prosperity in their relations."

H. P. Fairchild: "Since sociology is the science of human relations it ought to be as easily comprehensible as possible to the layman, and to that end it should reduce the use of unusual, artificial, or technical terms to the minimum consistent with scientific precision and clarity."

Ellsworth Faris: "Because well-meaning reformers and agitators do great harm when their zeal is not according to knowledge, my wish for our young sociologists is that they may devote their lives to the calm and unemotional pursuit of understanding and of the truth that our life may be enriched."

J. M. Gillette: "Beyond the confines of laboratory research, sociology ranks as well as most physical sciences in ability to foretell what will happen a hundred years hence out in the great universe of things."

J. L. Gillin: "It is about time that sociology stop wasting its time discussing such weighty subjects as 'definition of definition' and get to work on the analysis of the present world-mess."

Frank H. Hankins: "Sociology needs to attract as permanent recruits a larger proportion of the ablest students, and this it can do only by ceasing to be a *popular* undergraduate subject and becoming as demanding as the laboratory courses."

George A. Lundberg: "Sociologists are still inclined to look to ideological panaceas like international organization for remedies which can in fact come only through the development and application of sociological science, on which successful organization itself depends."

R. M. MacIver: "More than technicians, and more than researchers, and more than experts—sociology needs *sociologists*."

Howard W. Odum: "In the present contemporary scene, Sociology has its greatest opportunity up to now."

NEWS AND ANNOUNCEMENTS

Bard College. Gerard DeGré, formerly instructor in Sociology at St. Lawrence University has been appointed assistant professor of Sociology, beginning September, 1946.

District of Columbia Chapter. The District of Columbia Chapter of the American Sociological Society concluded a successful year under the leadership of Clyde W. Hart on Monday, April 1. At the meeting on that date the following were elected as officers for the 1946-47 term: Margaret Jarman Hagood, president; Raymond V. Bowers, vice-president; Ruth Reed, secretary-treasurer; Harry Alpert, alternate representative on the Executive Commit-

tee. At an earlier meeting participation of the District of Columbia chapter in the proposed Washington Social Science Federation was authorized. Dr. Carl C. Taylor was selected by the Executive Committee of the chapter to act as representative on the Executive Council of the Federation. Dr. Peter Lejins was selected as alternate to Dr. Taylor. No further developments have been reported regarding the establishment of the Federation. Miss Elizabeth Herzog reported difficulty in finding a suitable place where the informal Tuesday luncheon meetings could be resumed. It was decided that the membership would be notified as soon as arrangements could be made. Transient sociologists are cordially invited to take part in these luncheon meetings and are urged to check with the new officers for details.

Duke University. The Board of Missions, the Board of Evangelism, and the Crusade for Christ of the Methodist Church will distribute among their workers 5,000 copies of *The World's Need of Christ* by Dr. Charles A. Ellwood, Emeritus Professor of Sociology of Duke University. This book was first published in 1940. This new edition, now in press, will be bound in paper covers, and will not be put on sale. Dr. Ellwood will represent the American Sociological Society as its official representative at the Sesquicentennial celebration at the University of North Carolina April 12 and 13.

Emeritus Membership in the Society. When the Constitution of the Society was last revised, a provision for emeritus membership was included. It provides that "Any member of the Society, when retired by his institution, provided that he has paid dues to the Society continuously for at least twenty years, may become an emeritus member of the Society. Emeritus members pay no dues but shall have all rights and privileges of membership." Any member who is eligible under these provisions and wishes to apply for classification as an emeritus member is asked to notify the secretary.

Inter-American University. John Biesanz is now serving as visiting professor in sociology from the United States at the Inter-American University in Panama under the state department travel grant program. Dr. Biesanz, who was 1942-43 exchange professor at the University of Costa Rica, was recently discharged from the Army. *Costa Rican Life*, written in collaboration with Mrs. Biesanz and published by Columbia University Press in December, 1944, is now in its third printing.

National Science Foundation. The Subcommittee on War Mobilization of the Committee on Military Affairs in the Senate has reported on the proposal to establish a National Science Foundation and the extensive hearings which it held late in 1945. Following these hearings, there was introduced into the Senate a new bill, S. 1720, by Senators Kilgore, Johnson of Colorado, Pepper, Fulbright, and Saltonstall. The new bill provides for the establishment of a National Science Foundation to

be administered by an administrator who is to be a full-time Government employee. The Foundation is to have eight divisions: Mathematical and physical sciences, biological sciences, social sciences, health and medical science, national defense, engineering and technology, scientific personnel and education, publication and information. The Foundation as well as the separate divisions are to have advisory committees to assure the active participation in the work of the Foundation by large numbers of scientists who cannot give full time. The bill provides for the support of research and development through contracts and grants to universities, foundations, and Government agencies. It is explicitly pointed out that the Foundation shall not limit research activities of existing Government agencies nor interfere with the administration of their research programs. The bill also provides for the establishment of scholarship and fellowship programs at the undergraduate, graduate, and post-doctoral levels. It provides for the maintenance of a register of scientific personnel. It provides for the wide dissemination of research findings and requires positive steps by the administrator to eliminate any restraints of scientific freedom. It also provides for participation in international scientific societies and in international research projects.

Ohio Wesleyan University. A new volume, *Religion in the Struggle for Power*, on the sociology of religion written by Dr. J. Milton Yinger, assistant professor of sociology at Ohio Wesleyan University, has just made its appearance as fifth in a series of sociology texts published by the Duke University Press.

Pacific Sociological Society. The first regular annual meeting of the Pacific Sociological Society since 1941 was held at San Jose, California, on April 19 and 20. Last year the membership of the Society decided overwhelmingly to change the date of the annual meeting from the Christmas holidays to the spring of the year in order to avoid any conflict with the meeting date of the American Sociological Society. The central theme of the Conference was race relations on the Pacific Coast. The Committee on Nominations reported that the following persons received the largest number of votes for the respective offices in the recent election: *President*, Calvin F. Schmid, University of Washington; *Vice-Presidents*, Northern Division, C. W. Topping, University of British Columbia; Central Division, Audrey K. James, Mills College; Southern Division, Leonard Bloom, University of California at Los Angeles; *Secretary-Treasurer*, Virginia J. Esterley, Scripps College; *Members of the Advisory Council*, Hubert Phillips, Fresno State College; Fred Yoder, State College of Washington.

Pennsylvania State College. Seth W. Russell has been promoted from Assistant Professor to Associate Professor. Frederick B. Parker, formerly a member of the Bucknell University faculty, has been appointed Assistant Professor of Sociology.

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St. Lawrence University. George K. Brown, assistant professor of Sociology has been appointed Acting Dean of Men of the college. After returning from three and a half years' army service in January, Dean Brown became chairman of the veterans' education committee at St. Lawrence in addition to continuing his teaching duties.

Smith College. Professor Frank H. Hankins returned late in January from his teaching at the American University in Biarritz. Last October the Princeton University Press published Professor Gladys Bryson's book *Man and Society: The Scottish Inquiry of the Eighteenth Century*. Mrs. Margaret Alexander Marsh's leave of absence has been extended to February, 1947 to allow her to complete her study of mono-culture in Latin America. She spent the month of March in Venezuela gathering data on the effects on the total economy and especially on the level of living of that country's extreme specialization in the petroleum industry. The research is being financed by a grant from the Rockefeller Foundation. In September Charles Hunt Page of the College of the City of New York, recently Lt. Commander in the Navy, will join the staff as assistant professor.

Social Science Research Council: War Department Project. A small group of Psychologists and Sociologists formerly with the Research Branch, Information and Education Division, War Department, are now engaged in the analysis of research materials collected by the Research Branch during the war and the preparation for publication of materials likely to be of interest to professional social scientists. Four volumes are expected to go to press in the autumn of this year: two will analyze substantive materials on the social psychology of American troops during World War II, a third will present experimental studies on problems in communication especially with respect to Army orientation and training, and the fourth will contain methodological and technical materials developed in the work of the Research Branch. The project is sponsored by the Social Science Research Council through a special committee headed by F. H. Osborn, formerly the Major General in charge of the Information and Education Division, and is financed by a grant from the Carnegie Corporation. It is directed by Dr. Samuel A. Stouffer, Harvard University, and Dr. Carl I. Hovland, Yale University. Members of the American Sociological Society working on this project are, in addition to Dr. Stouffer, Leonard S. Cottrell, Jr., Leland C. DeVinney, Louis Guttman, Shirley A. Star, and Edward A. Suchman.

Carl C. Taylor has sent in the following statement about foreign service: "A number of sociologists have evinced interest in foreign service assignments. Opportunities for foreign service are appearing frequently. One place where these opportunities and desires can be brought to focus is the Office of

Foreign Agricultural Relations, U. S. Department of Agriculture. I suggest that the sociologists interested in foreign service write Dr. Olen E. Leonard, Acting Head, Extension and Teaching Division, OFAR, USDA, and specify in which countries they are especially interested and in which languages they have special qualifications."

United Nations Statistical Commission. The Economic and Social Council of the United Nations in February established a Statistical Commission with general responsibilities for assisting the Council in co-ordinating the statistics which will be required from member governments and developing the central statistical services of the Secretariat. The Council elected the following persons as initial members of the Statistical Commission: H. Campion (United Kingdom), head of the Central Statistical Office of the British Cabinet; M. G. Jahn (Norway), President of the Bank of Norway; M. A. Teixeira de Freitas (Brazil), Secretary General of the Brazilian Institute of Geography and Statistics; P. C. Mahalanobis (India), Statistical Laboratory, Presidency College, Calcutta; Stuart A. Rice (United States), Assistant Director of the Bureau of the Budget in Charge of the Division of Statistical Standards; and Professor Alfred Bernard Sauvy (France). Three other initial members of the Commission are to be designated by members of the Council for China, Ukraine and the U.S.S.R.

The purposes and activities of the Statistical Commission are described in the Resolution of the Economic and Social Council of February 16, 1946 (Document E/20 of February 15, 1946) part of which is quoted herewith. "The Commission shall assist the Council: (a) in the co-ordination of national statistics and the improvement of their comparability; (b) in the co-ordination of the statistical work of specialized agencies; (c) in the development of the central statistical services of the Secretariat; (d) in advising the Members and organs of the United Nations on general questions relating to the collection, interpretation and dissemination of statistical information; (e) in promoting the improvement of statistics."

University of Michigan. The offerings of this department have been expanded with the coming of Dr. H. M. Miner to the Staff. He is offering two advanced courses: Race and Culture Contacts for upperclassmen and graduate students, and Latin American Social Systems for a group of Army officers who are enrolled in a program for military attaches, sponsored by the Army. A teaching fellow, Mr. Donald J. Bogue, has been added to the staff. He has just returned from 4 years' service as an officer with the Navy.

University of North Carolina. Howard W. Odum will be visiting Professor at Yale 1946-47. John P. Gillin comes to the University of North Carolina as Professor of Anthropology and as Research Professor in the Institute for Research in Social Science.

During the summer of 1946, he will continue his South American explorations and will also give lectures at the University of Colombia at Bogota where he will discuss aspects of regional research. Guy B. Johnson continues on leave of absence as Executive Director of the Southern Regional Council. Harold D. Meyer has requested to be relieved of the administrative chairmanship of the Department of Sociology in order to continue developing a concentration of courses in recreation and leisure time activities. Gordon W. Blackwell accordingly takes over the chairmanship of the Department. He is directing the completion of 13 monographs on the Resources of the South. The first of these to be published is *Research in the South* by Dr. Edith Webb Williams, Research Associate in the Institute for Research in Social Science. Katharine Jocher is assuming responsibility for the technical editorship of the 13 monographs on the Resources of the South and of the study of community-church relationships in the South, which the Institute for Research in Social Science has under way. Lee M. Brooks and Wiley B. Sanders will feature concentration of courses on Criminology and Delinquency. Professor Sanders is completing a five year study of Juvenile Delinquency. Harriet L. Herring is doing a study of personnel stabilization policies for a group of textile mills in North Carolina. The State Planning Board has published her monograph on *New Industrial Opportunity*. Rupert B. Vance's volume *All These People* has just been published by the University of North Carolina Press. The Southern Regional Council has published his *Wanted: The South's Future for the Nation*. Professor Vance will teach courses in American Regionalism and Population at Columbia during the summer. John E. Ivey, Jr., who comes to the University after three years as executive secretary of the committee on the Southern Regional Studies and Education of the American Council on Education, is developing a Division of Research Interpretation in the Institute. Beginning in the fall of 1946, John A. Parker becomes Director of the Division of Planning in the Institute for Research in Social Science. The American Family Magazine Book Foundation has just published *Understanding Marriage and the Family*, a volume in honor of Professor Ernest R. Groves. Nicholas J. Demerath becomes Professor of Sociology and Research Associate in the Institute for Research in Social Science. He will teach courses in social theory while devoting considerable time to his special research in housing and urbanism. The University of North Carolina conferred the Honorary degree of LL.D. on William F. Ogburn at its April Convocation celebrating the bicentennial of the University's founding.

University of Washington: Read Bain, Miami University (Oxford, Ohio), Raymond E. Bassett, Gorham (Maine) State Teachers College, Robert Bierstedt, University of Illinois, and Stuart C. Dodd of the American University of Beirut (Walker-Ames

Lecturer), will offer courses during the summer session. Members of the regular staff who will also be in residence during the summer session are Norman S. Hayner and Calvin F. Schmid. Robert O'Brien will teach at the University of North Carolina during the summer. Charles E. Bowerman (formerly of the University of Chicago) has been appointed assistant professor beginning with the fall semester. Julius Jahn (formerly of the University of Minnesota) has been appointed instructor. Calvin F. Schmid has been elected president of the Pacific Sociological Society. George A. Lundberg will deliver a series of lectures at Stanford University in August; A Spanish edition of his *Social Research* is being published by *Fondo de Cultura Economica*.

Wayne University. Six visiting professors and three regular staff members will teach in the Department of Sociology and Anthropology during the summer of 1946. The visiting teachers are Dr. Carl F. Butts, Syracuse University; Dr. Arthur Katona, Ohio University; Dr. Maurice T. Price, University of Illinois; Morris S. Schwartz, University of Chicago; Dr. Sidney E. Slotkin, Howard University; and Dr. Arthur L. Wood, Bucknell University. They take the places for the summer of Dr. H. Warren Dunham, Maude L. Fiero, Nelson Foote, Dr. Edward C. Jandy, Dr. Melvin M. Tumin, and Dr. Alfred McClung Lee. Dr. Dunham will be engaged in special research for the State of Ohio. Dr. Jandy is now UNRRA Director of Relief in Ethiopia. Dr. Norman D. Humphrey, assistant professor, will serve as acting chairman of the department during Dr. Lee's absence. Donald C. Marsh, associate professor, will be in residence a part of the summer, and Frank E. Hartung, instructor, will teach throughout the two six-week sessions. In the fall of 1946, Dr. Humphrey will introduce a course in rural sociology at Wayne, co-ordinated with Wayne's Schmidt Farm Project.

Professor Leslie D. Zeleny represented the American Sociological Society at the inauguration of President J. L. Morrill of the University of Minnesota, April 25, 1946.

EUBANK, EARLE EDWARD: 1887-1945

After a long period of intermittent illness, Professor Earle Edward Eubank, Head of the Department of Sociology of the University of Cincinnati, died at a hospital near his winter home in Sharps, Florida, on December 17, 1945.

Earle Eubank was born in Columbia, Missouri, on March 20, 1887. He attended William Jewell College from which he received the degree of Bachelor of Arts in 1908, and Master of Arts in 1913. His graduate studies were continued at the University of Chicago, which institution awarded him the degree of

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Doctor of Philosophy, *cum laude*, in 1916.

His experiences were rich and varied. In the interval between his undergraduate and graduate work, Professor Eubank served as Supervisor of Schools for the Bureau of Education of the Philippine Islands. His first-hand contacts with native tribes stimulated his interest in the study of culture, and influenced much of his later writing and teaching. In Chicago, he served from 1916 to 1921 as Professor of Sociology in the Y.M.C.A. College, now George Williams College, and as Dean of that institution from 1918 to 1921. Meanwhile, he served as Head of the Y.M.C.A. program of training for war work, and as director of war secretarial training for the central military department of the War Work Council. He was a member of the American Seminar in Europe in 1921 and again in 1934, and a member of the White House Conference on Child Welfare in 1931. He was appointed Head of the Department of Sociology of the University of Cincinnati in 1921, which position he held until the time of his death. From 1923 to 1931, he added the duties of Director of the Program of Training for Social Work to his already heavy schedule. He was elected to many offices and appointed to numerous committees—local, national, and international—all of which added to the richness and variety of his experiences.

Professor Eubank was best known professionally for his work with concepts, especially for his volume, *The Concepts of Sociology*, but also in connection with the Committee on Conceptual Integration, and as Associate Editor of the *Dictionary of Sociology*. His organization of concepts into an integrated system was a model of scholarly work of this type. Had good health continued for another two or three years, his reputation would have been further enhanced by the publication of important volumes on the History of American Sociology and European Sociology. Few, if any, other American scholars knew personally as many outstanding European sociologists as did Dr. Eubank, and none had worked out more systematically the central core of theory of each of these European scholars.

Professor Eubank's interest in sociology

was practical as well as theoretical. He studied several pressing concrete problems in social life with the aim of finding means of amelioration. His best-known studies of this type touched on family desertion, loan sharks, public comfort stations, consumer's credit, and unemployment. He was active in initiating and furthering community studies in Cincinnati by means of census tracts. He was instrumental in reclaiming a professional criminal, and wrote a sociological analysis of this felon's autobiography. He was deeply interested in social work and in the training of social workers, but always insisted on maintaining a clear distinction between sociology and this professional field.

A few words should be added about Earle Eubank as a person. He was deeply religious, but not in the narrow, denominational sense. A profound religious faith motivated and guided his behavior, but did not distort his professional objectivity. He was thoroughly democratic as an administrator, always insisting that discussion continue until consensus had been achieved. He was a delightful companion, possessed of a ready wit, a keen sense of humor, and an exceptional richness of anecdotes. He enjoyed stimulating discussions, especially when concerned with broad philosophical principles. His familiarity with a wide range and great variety of literature was a constant source of amazement. He was a cultured gentleman in the truest sense of the word. He had a genius for friendship. Few other people would be called "friend" by so many persons from such varied walks of life and from so many parts of the world. He was generous, both of his possessions and of himself, giving without stint to family, colleagues, friends, and myriad public causes. Perhaps his willingness to give so generously of himself, both to his extensive circle of friends and to his arduous professional duties, exhausted even his abundant well of energy and led to his early death at the age of fifty-eight years. But those who were privileged to know him well realize that he crowded into less than six decades a greater richness of life than can ordinarily be attained in the traditional three score years and ten.

JAMES A. QUINN

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Las Poblaciones del Brazil. By ARTHUR RAMOS.
Mexico D. F.: Fondo De Cultura Econo-
mico, 1944. 207 pp.

In this popularly written monograph one of Brazil's leading anthropologists attempts to describe the biological and cultural characteristics of Brazilian population. In 1890 the people of Brazil numbered only 14.3 million. In 1940 they were 41.5 million. Claiming that only 9 per

cent of this 190 per cent increase was due to immigration, the author has no difficulty demonstrating the high fertility of Brazil's principal groups: The European Caucasians, Negroes, American Indians, and their intermixtures. If the book may be said to have a theme, it is that of the significance of the development of a homogeneous Brazilian people. The "enormous percentage of mestizos in Brazil (33 per cent in

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1940 is proof of the fact that racial intermixture is proceeding at a rapid rate through inter-marriage and promiscuity which since colonial times has not been hindered by legislative restrictions." (p. 204). Not only was this intermixture not interfered with, but the Portuguese attitude expressed through church and state facilitated it.

Most of the monograph is devoted to demographic, racial and cultural descriptions of the various Indian and Negro stocks which have in the past and will in the future contribute to the culture of Brazil. So little is known about the special cultural characteristics and social organization of the important Indian groupings that the author, to demonstrate their contributions to Brazilian culture, frequently relies on broad generalizations. The names of many investigators, whose studies support the generalizations, are mentioned but unfortunately additional documentation is generally lacking.

Among the contributions which the Indians are given credit for making in the development of Brazilian culture are the whole cassava and corn configurations, various types of hammocks, kitchen utensils, medicines, changes in the Portuguese language, folklore and religious beliefs.

Six chapters are devoted to the Negro groups and their contribution to Brazilian culture. Effort is made to indicate specific African origins and particularly to explain their contributions to the public festivals of Brazil. The author claims that the cultural heritage, enslavement and the conditions of the new world developed in the Negro a remarkable group spirit which in Brazil produced the great carnivals and other forms. He suggests that this same urge produced the spirituals and the work songs of Southern United States. The author lays considerable stress on the fact that a legal "color line" such as that prevailing in the United States does not exist in Brazil, but he admits that prejudices of an "economic and cultural" nature do exist.

CHARLES P. LOOMIS

Michigan State College

Psychology of Sex Relations. By THEODORE REIK. New York: Farrar and Rinehart, 1945. 243 pp. \$2.25.

The book consists of a critical analysis of Freudian psychology and suggests some revisions. It will prove more valuable as a reference on the weaknesses of Freudian concepts than

as a treatise on modifications of psychoanalytic theory.

The author, who is an admirer of Freud and who has had 34 years of analytic practice, feels that Freudians exaggerate the importance of sex in interpreting human behavior. He holds that many of their statements are absurd: it is as sensible to speak of psycho-excretion as psycho-sexuality; it is nonsense pure and simple to say that love is aim-inhibited sex; all evidence discredits the theory that the crude sex drive can be sublimated; Freud's basic concept that neurosis has a sexual etiology is erroneous; and the Freudian concepts of the cannibalistic character of infantile sexuality, the sexual lust of the infant in sucking, and the identity of the origin of tenderness and lust are nothing but fairy tales. These are but samples of the author's pungent attacks on Freudian theories.

The author in Part II, "Love and the Ego-drives," and Part III, "Love and Lust," attempts to show a relationship between behavior such as love, jealousy, unfaithfulness, and promiscuity, and primitive needs or drives of the ego. While sex is included among the ego-drives, the emphasis is on aggressiveness, possessiveness, and the desire to conquer. These and such later offspring as ambition, the wish to be liked, the impulses of rivalry, the need for social recognition, and love are descendants of the self-preserving instincts.

These last two parts of the book have two major weaknesses: there is a minimum of factual materials and a maximum of speculation; also there is an inadequate conception of the power of patterns of culture in determining the sexual and affectional behavior of a person.

The social scientist will appreciate the author's emphasis on tentativeness of his conclusions and on the need for additional research to verify the theories he presents. Such attitudes are infrequent in the writings of psychoanalysts.

HARVEY J. LOCKE

University of Southern California

The Rubber Workers. By HAROLD S. ROBERTS. New York: Harper and Bros., 1944. pp. xiii + 441. \$4.00.

A shrewd handful of young sociologists are beginning to recognize that work-situations and functional organizations of people-at-work constitute a top priority research area in the

sociology of industrial society. This excellent book by a Senior Economist in the National War Labor Board illustrates (a) what economists are prepared to do with the field of organized labor, and (b), by its omissions, the wide-open field awaiting the sociologist and the social psychologist.

The obvious omissions from Dr. Roberts' book include such vital aspects as these: the internal structure of the union itself; the process of developing competent leaders at all levels, including the level of the corporals and sergeants at the grass-roots level of the locals, in such a rapidly-growing new union; the internal problems of union control; the intricate level of the meaning of unionization to these thousands of individual rubber workers who have demonstrated their capacity to act for themselves against William Green and in such situations as sit-down strikes; and, at the level of ownership and management, the structure of ties and channels of action within the collectivity, "industry," as it confronts "labor."

A sociologist necessarily reads an economist's book like this tangentially, for the questions it pops up over the horizon of consciousness for the reader from a discipline other than economics. If the following list suggested to this reviewer by Dr. Roberts' book seems somewhat scattered and thin, that is a commentary not on the adequacy of the book in terms of what it sets out to do but on the difficulty of mining the other fellow's specialty for one's own needs:

1. Chapter III, on the 1913 strike in Akron, contains material on the anti-labor mobilization by industry of phony "Citizens' Committees" and community action. These techniques, so amply documented in the pages of the La-Follette Committee investigations of the Associated Farmers in California, the industrial cities of the East and Middle West, and the National Association of Manufacturers, have been singularly disregarded by us specialists in "community organization." They provide excellent insight into the pliability of middle-class elements before big-industrial interests. In our but casually-organized urban world, they reveal the fear and helplessness of little business and the professions, their susceptibility to big-shots, and, generally, how far how little will go to effect the wrong kind of community organization. (In passing, it is interesting to note that the rubber industry used in Akron in 1913 virtually the complete program

that became famous in 1934 as the Mohawk Valley Formula, when it was used by Remington Rand in New York.)

2. What are the elements of internal organization in management and in union that make one corporation come to terms with its union local, while another corporation in the same industry and city is able to employ the process of negotiation "almost to negotiate a union to death . . . in going through the motions of collective bargaining without actually bargaining?"

3. The decentralization of the rubber industry described in pp. 323-44 (e.g., Kelly-Springfield's moving from Akron to Cumberland, Md. "as a result of extremely favorable inducements offered by the city council") suggests to the urban sociologist the need to pay more attention to the social price paid for "run-away" industries by cities engaging in this "beggar-your-neighbor" game.

4. How important as a datum for the sociologist and social psychologist are the special qualities associated with an industry's having, as in the present case, a recent and fabulous rise? This quality is obviously important in the movie industry, and Rosten was well aware of it in his "Hollywood." The rubber industry is less glamorous, but it has been a big- and easy-money industry for the "big four" in Akron controlling 80 per cent of the industry's output. B. F. Goodrich, a practicing New York physician, got into the industry through exchanging some real estate for the stock of a small rubber company in Hastings, N.Y. F. A. Seiberling founded Goodyear in 1898 by purchasing two small Akron plants on the basis of four promissory notes of \$2,500 each and a down-payment of \$3,500 borrowed from a friend. The capitalization of Goodyear grew to \$130,000,000 by 1935. With a capitalization of \$100,000 authorized originally, of which only one-half was issued, the company showed over a million dollars in net earnings in 1909. Each share was split into two. A similar stock dividend of 100 per cent was declared in 1910, and another in 1912. A 20 per cent stock dividend was declared in 1914, and a 100 per cent dividend in 1916. Early in 1920 a stock dividend of 150 per cent was declared. In an industry with an open record of such handsome takings by the owners, how do these known facts color the psychology of management and of labor in their dealings with each other? What is the result in the community morale of

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5. What "lone wolf And what to the obve rubber con

6. In an ber industr cations and investigat tee on Ed see (p. 19) flatly deny undercover was paying to the Ak stantial po in the hirin gracefully tions Auxil the proble and respon our kind of by Barbara and Privac Political Q

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the Akrons of the United States of the dual strains of emulous approval and of resentment created by such a record of "easy money"? (The industry can not plead its superior efficiency, for Dr. Roberts quotes an article in the *American Economic Review* in 1938 which states: "It is evident that the industry is not organized in the most efficient way and that tires are not sold at the lowest possible prices. Investment in the industry is excessive, many plants are uneconomically large, and selling expenditures are out of proportion to any real benefits resulting from product differentiation.")

5. What factors enabled Goodyear to be a "lone wolf" in the industry in its labor policy? And what is the relation of such a lone hand to the obvious collaboration with the other big rubber companies in certain other respects?

6. In and out of the drive to unionize the rubber industry one sees the characteristic prevarications and evasions of management before such investigating bodies as the LaFollette Committee on Education and Labor. For instance, we see (p. 196) President Litchfield, of Goodyear, flatly denying knowledge of the existence of undercover men in his plant; when his company was paying year after year 5 cents per worker to the Akron Employers' Association, "a substantial portion" of whose activities consisted in the hiring of industrial espionage from a firm gracefully disguised under the name, Corporations Auxiliary. This raises for the sociologist the problem of the dual system of morality and responsibility institutionalized throughout our kind of society and so suggestively analyzed by Barbara Wootton in her article, "On Public and Private Honesty," in the (English) *Political Quarterly* for July-September 1945.

One other point is worth noting: Students of social stratification will find on p. 20 a percentage breakdown by socio-economic groups and by sex of American rubber workers, adapted from Alba Edwards.

ROBERT S. LYND

Columbia University

Adult Adjustment of Foster Children of Alcoholic and Psychotic Parentage and the Influence of the Foster Home. Memoirs of the Section on Alcohol Studies, Yale University, No. 3. By ANNE ROE, BARBARA BURKS and BELA MITTMELMANN. New Haven: Quarterly Journal of Studies on Alcohol, 1945. 161 pp. \$2.00.

The results of this meticulous clinical psychological study constitute a warning against considering parentage as an index of hereditary nervous instability or the home as coincidental with the total social environment. Initiated in 1937 by the New York State Charities Aid Association as a sequel to Theis' *How Foster Children Turn Out* published 15 years earlier, it was finally completed at the Yale Laboratory of Applied Physiology.

From a large number of available SCAA case records 78 foster children were finally selected for the main study which was based on a statistical comparison of four small groups of children of varying parentage; namely, alcoholic, psychotic, alcoholic-psychotic, and normal. From previous investigations it was assumed that alcoholism and mental disorders would be found in about 20 per cent of the children of alcoholic and psychotic parents. Instead no child was discovered to have become alcoholic or to be suffering from a psychotic condition, nor were any significant intergroup differences demonstrated relative to present adjustment and hence no association with parental characteristics. Having been removed from their own homes, most of the 78 children had succeeded in making fairly satisfactory adjustments. Furthermore, no relationship could be shown between successful adult adjustment, on the one hand, and either early mistreatment, or the degree of adequacy of the foster home, on the other. While no specific factors seemed to make for later adjustment it was clear that affection and disciplinary leniency on the part of the foster parents were associated with good adjustment.

A sizable number turned out well despite "poor heredity," bad early homes, and inferior foster families. The authors suggest therefore the probability that two other factors may be significant; namely, community influences, on the one hand, and a certain "biological orientation of the human organism toward intergration," on the other.

ERNEST B. HARPER

Michigan State College

Socialism Looks Forward. By JOHN STRACHEY. New York: Philosophical Library, 1945. 153 pp. \$2.00.

This book is divided into two parts: Part I, "Things as they were"; and Part II, "Socialism." However, the first ten chapters constituting Part I are concerned with an

economic analysis of how capitalism works; the next two chapters of Part II, tell how socialism works; and the last two chapters following examine the problems and prospects of Britain becoming socialist. The entire work is addressed to the British people, but the principles involved are universal. Although the style of writing is that of a primer, some vital points of theory and practice are touched upon. There are very few footnotes and no index.

The central point of Strachey's argument is that capitalism has been constantly giving way to socialism, that socialism will raise by many fold the consumption level and social welfare of nine-tenths of the British people, and that the burden of accomplishing this rests mainly upon the organized workers.

He demonstrates that every democratic reform has been a step toward socialism and a coincident curtailment of the "liberties" of the ruling class, i.e., "The greatest industrialists, the great bankers, the great newspaper owners . . . the men who really own the country." (p. 89). Moreover, in a way, the very opposite of that taken by such writers as Friedrich Hayek (*Road to Serfdom*), Strachey declares: ". . . the perfect liberties which existed before the factory and social legislation of today was passed, made life into an indescribable torment for large sections of the British people. That torment is proof that liberty of this kind is a cheat. The absence in any country, in which the means of production are owned by some 10 per cent of the people, of laws preventing that 10 per cent from pushing their exploitation of the rest of us to unbearable degrees, creates not liberty but the blackest of tyranny." (pp. 63-64).

It is not that we do not like socialism for we have been inevitably going in its direction. Only, we have been backing up toward it, and refusing to recognize or to admit our destination. John Strachey seems to be on solid ground when he says: "It is perfectly possible to do away with mass unemployment, even before the present economic system has been fully abolished; but it can only be done by measures which will seriously modify the system, and take an appreciable step toward Socialism." (p. 99).

The author points out that there are two classes of private property: private property in the means of production and private prop-

erty in consumer's goods. Socialism will not only abolish the first class but also greatly augment the second. "What socialism really means is giving nine-tenths of us a chance to get at least ten times as much individual, private property—ten times as much clothing, houses, gardens, motor-cars, supplies of food, furniture, and the like as we ever get today." (p. 102).

As Wordsworth wrote concerning the French Bourgeois Revolution: "Bliss was it in that dawn to be alive," so also Strachey seems to feel: "It is our fate to live in one of those times in history when a whole economic system is in decay. . . . The only way out is to put a new one in its place. That is what we must, can, and will do." (p. 100).

Socialism Looks Forward is one of many books on socialism written by John Strachey, a British Socialist, sometimes called "the leading socialist economist writing in English." His *Communist Struggle for Power* (New York, 1933), presented him to American readers as a mature thinker. As socialist-advocate and theorist, probably only the work of Harold J. Laski and that of Sidney and Beatrice Webb compares in importance with his. Although this latest book is intended for popular reading, its factual, economic approach renders it dry in spots; while its elementary style may try the patience of the sophisticated reader. The key-concept, "political class," remains badly defined. It is, nevertheless, an authoritative and closely-reasoned exposition of the nature of "political-class" struggle and the rise of socialism in Britain.

OLIVER C. COX

Tuskegee Institute

Survey of Social Science. By MARION B. SMITH. Boston: Houghton Mifflin Co., 1945. 728 pp. \$4.00.

Here we have a new, and far better than ordinary, encyclopedia of the social sciences for the undergraduate. Marion Smith's lusty eclecticism literarily, if succinctly, encompasses man's role in the universe—past, present, and future. Commencing with a discussion of "What is life?" the uneasy sophomore is reassured (on Ralph Linton's authority) that "A belief in evolution and in the existence of a Creative Intelligence are in no ways incompatible."

That embarrassing stumbling block neatly disposed of, Mr. Smith proceeds to discuss man's

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animal equipment, his psychological attributes and the geographical setting in which man finds and makes his culture. Population composition and distribution are analyzed in terms of biological, rural-urban and cultural differences with special attention devoted to class differentiation and social mobility.

As in the above sections, the author's discussion of our institutional systems is replete with interesting and well chosen cross-cultural references. Each of the major institutional patterns, marriage, the family, education, recreation, religion, health, aesthetic, and economic—all of these, are considered in their dysfunctional as well as functional operation.

It is probable that many critics of art will demur from his optimistic estimate that "conditions in the United States at present seem to be favorable for the future development of a great art." One wonders how this is consonant with the author's sober critique of the American economy, a critique leading to the careful conclusion that "the idea of laissez-faire must be discarded in favor of a degree of governmental regulation or control." Unresolved throughout, as in this seeming paradox, is the problem of the interrelationship, and the causal dynamics of our institutional processes.

Political institutions of every variety, level, and several nationalities, are meticulously elaborated. Apart from the American federal and state apparatus, the complex organization of constitutional monarchy in England and socialism in the U.S.S.R. are given the most extensive treatment. The discussion of the latter is probably among the least biased to be found in any textbook.

Since so much attention is devoted by the author to what usually goes under the heading of "social pathology," it seems somewhat incongruous that only passing attention is given the problem of the Negro in America. Also conspicuous by its absence is any presentation of the growing problem of American anti-Semitism. Serious as these shortcomings are, they by no means vitiate what seems in most other respects a work worthy of educating American youth.

ALVIN W. GOULDNER

Department of Scientific Research: American Jewish Committee.

Psychiatry in Modern Warfare. By EDWARD A. STRECKER and KENNETH E. APPEL. New York: Macmillan, 1945. pp. viii + 88. \$1.50. This valuable little book is divided into two

parts dealing respectively with a comparison of the role of psychiatry in two world wars and with the psychological aspects of demobilization. Although written apparently prior to even V-E Day, it is timely and the analysis stands up well to the hard test of unfolding events.

For various plausible reasons World War II is pronounced productive of greater psychological strain. Yet in meeting the greater challenge the psychiatric experience of War I was not fully utilized in terms of organization.

The statistical evidence presented concerning the mental health of civilians and soldiers is none too clear. While hospital admission rates for civilians held fairly constant, the rate of admission of soldiers to army hospitals was about 30 times higher in both wars and this in spite of more careful screening in War II (12 per cent as compared with 2 per cent rejections). In World War II the proportion of neuropsychiatric battle casualties was 1 in 3 as compared with 1 in 7 for the first global conflict. At times the proportion of discharges on psychiatric grounds approached 50 per cent in the recent conflict.

Granting the higher tempo of the recent war, it is held that the causes of mental breakdown were essentially the same in the two wars. Predisposition plays a part but even the strong crack under strain. Symptoms remain about the same save that anxiety reactions tend to replace conversion hysteria and psychosomatic symptoms recently claim greater attention as do ailments associated with life in the tropics.

The authors do not regard the motives, conflicts and mechanisms operating in War II greatly different from those observable in War I. Differences in psychopathology are explained by the deeper and more pervasive insecurity of modern war.

The therapy of War II by comparison stressed use of drugs such as pentathol for narcosynthesis, group therapy and preventive psychiatry. The prognosis of recovery seems about the same in World War II, 25 to 80 per cent depending on strength of personality, influence of external factors, prompt treatment and, of course, the criteria by which recovery is judged.

The authors are rather suddenly motivated to deplore the isolation of psychiatry, its ponderous terminology, its lack of integration with educational and community movements. Their somewhat vague awareness of the relation of cultural integration to mental hygiene prompts them to recommend a "service year" for young

people. It is doubtful, however, that fragments of the totalitarian pattern possess a proportionate virtue of the whole.

Concluding Part I, the authors somewhat repetitiously raise the question "Why the apparent increase in psychiatric conditions?" Their answer includes more careful screening, a tougher war, individualistic culture, lack of dynamic ideological motivation and the fairly constant factors of fear plus social pressure on the individual.

The second essay dealing with demobilization and return to civilian life presents a fairly conventional analysis. Very sensibly it is pointed out that most veterans will readjust in time, much depending on the relation of the military and civilian environments. There is the interesting suggestion that the psychoneurotic might adjust better to civilian life than the "normal" soldier. While adjustment behavior varies and almost universal experience will be disillusionment with the overidealized civilian environment, yet even the manifestations of disillusionment vary from person to person. The authors stress maturity of the veteran's personality as a basic factor in a good readjustment. They plead also for maturity of civilians in their relationship to veterans and for the mobilization of our limited psychiatric resources to meet the needs brought with peace.

The book could be better organized, statistical evidence could be more clearly presented, yet it would be hard to find as much solid and authoritative information concerning psychiatry in warfare in books twice the size. The compact little volume deserves wide reading.

CLIFFORD KIRKPATRICK

University of Minnesota

Ourselves, Inc. By LEO R. WARD. New York: Harper and Brothers, 1945. 236 pp. \$2.50.

Professor Ward's book presents an enthusiastic picture of numerous co-ops in the United States, touching briefly as well, on co-ops in England, Ireland, Sweden, Denmark, Italy and China. He himself visited eighteen communities in this country where co-operative endeavor in some form has been established and is functioning with some degree of success.

The author, a professor of Ethics and Philosophy at the University of Notre Dame, has a deep-seated conviction that the freedom of man, harassed on one hand by monopolies and big-business, and on the other by what he

terms "statism" or government control and regulation, can only be preserved by the growth and spread of co-operatives. This thesis is threaded through each of his chapters.

"The co-ops teach us to work with people and for people, and thus in a real way to love them. For that reason they can be ever so human and ever so Christlike. Nothing at all in their nature to prevent them, in fact, everything to encourage them to go along with what is most human and Christlike in us. I need not ask whether the same is so readily true of individualism as an industrio-economic or as a social technique. As for the collectivism, has big statism ever in any country made men free or kept men free?"

"Hence again and again the possible great good of the co-ops. 'Good' in the sense of helping to create an economic and social order that is open to what is truly human and Christlike in us."

The co-ops reported on were, for the most part, in the middlewest; Iowa, Illinois, Indiana, Wisconsin, Minnesota and largely in rural areas, although a few were in fairly large cities. Some attempt is made to describe the economic techniques used by these groups but in the main the details given are sketchy and not too enlightening. Professor Ward hints at many examples of accommodation, conflict, competition, and leadership problems. The observations, however, are too personalized to lead to any generalizations on the social process as it operates in these communities.

There were many of these co-operative groups that aroused the readers' interest. One of them was the community in Westphalia, Iowa, which is a Catholic parish. The church itself has taken an active role in the promotion of co-operative venture in Westphalia. The members seem to be well-knit and enthusiastic not only about mutual economic benefits but in religious, educational, and recreational programs as well. Characteristic of the majority of the co-ops presented was their unusual homogeneity which may very readily account for their success.

This book should prove very valuable for the lay reader who is unfamiliar with the co-operative movement. The author's enthusiasm is infectious and readers may easily be persuaded in part at least, to his fundamental faith in the co-op as a way of life in a democracy.

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For the sociologist, the book points to a rich and fertile field for significant sociological investigation.

JOSEPH B. GITTLER

Iowa State College

Alcohol, Science and Society. New Haven, Connecticut: Quarterly Journal of Studies on Alcohol, 1945. 473 pp. \$5.00.

This work consists of transcripts of lectures with following discussions at the 1944 session of the Yale Summer School of Alcoholic Studies. The lectures vary widely in subject matter and in quality. On the whole, however, the work represents a most useful and authoritative body of material, much of which is outstanding in originality and significance. Particularly noteworthy are the discussions delivered by members of the "Applied Physiology" group of Yale, who are mainly responsible for the experiment in integrated research and clinical treatment in alcoholism now under way at that institution. The sociologist will be especially interested in the lectures on "Drinking Mores of the Social Classes" by John Dollard; "The Functions of Alcohol in Primitive Societies" by Donald Horton; and "Alcohol and a Complex Society" by Sheldon D. Bacon. Another lecture by Bacon, "Excessive Drinking and the Institution of the Family" is a notable contribution to the literature of the Sociology of the Family, without regard to the question of alcoholism.

The social psychologist will also find the volume rich in information and stimulation, particularly the discussion of "Pastoral Counselling of Inebriates" by Reverend Otis Rice, and the account of the origin and philosophies of "The Fellowship of Alcoholics Anonymous" by "W. W. (one of its founders)".

Some of the subject matter, relating to prohibition and control of alcoholic beverages seems, at first glance, to be outdated by the Twenty-first Amendment. In fact, one might raise the question whether any work that treats of alcoholism as a major social problem is congruent to contemporary America. The contents of this book suggests two forms of response to such a query. In the first place, the Twenty-first Amendment was not a simple repealer of the Eighteenth Amendment. Section 2 of that amendment enjoined a more sweeping limitation on interstate commerce in intoxicating liquors than has been in effect at any time, excepting during the period 1917-1933. Moreover, such regulation is constitutional, not

statutory, and its enforcement is an obligation of the federal government. The net effect of this little-known feature of the Twenty-first Amendment is that if there should be a revival of local-option or statewide prohibitory movements, then there would be a species of federally-enforced prohibition over all the areas covered by such legislation, as indeed there now is in such states as Oklahoma and Kansas.

Second, and what is more important, is the fact that there seems to be making rapid headway in this country a conviction that alcoholism constitutes a problem of major significance. As to the extent of alcoholism, and its sequelae in associated pathologies, the data presented, while falling below the exaggerations of propaganda "statistics" are impressive enough—not to say shocking. Jellinek (pp. 23-24) presents estimates that, of approximately 100 million persons "of drinking age," 50 million use alcoholic beverages; of these, three million become "excessive drinkers"; and of these, 750,000 become "chronic alcoholics." Again, a study of inmates of Sing Sing Prison indicates that about a fourth of them were inebriates (p. 147). Yet again (pp. 255-256) chemical tests on automobile drivers involved in personal-injury accidents suggest that about half of them had been drinking, and that a third of them had a sufficiently high alcoholic blood concentration to be "under the influence." A controlled study in one city suggests that "the average driver in this range is 55 times more likely to be involved in a personal injury accident than drivers with no alcohol."

Such data as these furnish a clue to the increased concern among physicians, psychologists, social workers and law enforcement officers with alcohol and inebriety. That the general public has begun to share in this concern is indicated by the fact that a singularly unpleasant narrative of an alcoholic debauch, *The Lost Week End*, has recently become a best seller, and been adapted into a motion picture.

The participants in the symposium here being reviewed are, for the most part, not enthusiastic about prohibition. They tend to diagnose alcoholic addiction as a socially conditioned neurotic response to individual pressures and tensions, many of them associated with contemporary socio-economic structures. They propose to deal with alcoholism principally by individualized prevention and rehabilitation. Nevertheless, the American people are not prone to be content with an individualized approach to the solution

of any major social problem, once they have become seriously aware of it. This book is one of a number of evidences that such an awareness is in the making.

NILES CARPENTER

The University of Buffalo

Reveille for Radicals. By SAUL D. ALINSKY.
Chicago: University of Chicago Press, 1945.
228 pp. \$2.50.

Alinsky, self-styled "red," "radical," and "rebel," has produced a book which may be viewed in many perspectives. Alinsky himself takes great pains to identify his effort with the great literature of the American Revolution, in particular with the writings of Thomas Paine and Thomas Jefferson. Such a non-revolutionary journal as the New York *Herald Tribune*, on the other hand, has pontificated editorially that Alinsky's program "may well mean the salvation of our way of life." In this, Roman Catholic Bishop Bernard J. Sheil apparently agrees. *Time* furnishes the slant on Alinsky's "revolutionary movement" that it is the formula Bishop Sheil has selected to organize against secular radicalism in Chicago's "smoky, sprawling, brawling 'back-of-the-yards' district." Still other analysts have carefully stripped away the facade of "radical" pretensions and protestations and see underneath merely the old and standard pattern of middle-class reformism—no more and no less—wrapped in a package made from old tinsel.

Alinsky worked out his program of People's Organizations in developing one such for the Jungle—the area back of the stockyards. There he organized on the basis of the pressing miseries of the vast majority, their deprivations and previous hopelessness. He brought many factions together into an aggressive over-all planning and action body. He helped to redirect energies from intergroup tensions and struggles to common actions for common goals. In developing this program, he found it necessary to turn his back on certain characteristics of middle-class Liberalism. He found that he must be a Radical in the sense that he would not avoid "passionate partisanship"—"partisanship" for "the people" of course, and not for "a class" or other social segment. He also eschewed the Liberal's abhorrence of issues of power. "Every issue involving power and its use," Alinsky asserts, "has always carried in its wake the Liberal backwash of agreeing with the objective but disagreeing with the tactics." In other words, Alinsky was not content with solving the problems of one miserable type of

urban area; he had to generalize and philosophize and then utopianize from his limited experiences.

As he spins a definition of Radical that labels the "radicalism" of the *Herald Tribune* and Bishop Sheil, Alinsky fails to note that he continues to embrace one of the cardinal principles of the middle-class Liberal. Each page in his book carries with it the assumption that there is no such a thing as a tenable private or class interest which cannot be compromised with profit to "all the people" in terms of the Public Interest. Just use the bags of tricks of the organizational experts and the public relations managers to bring "the community" together, have "the people" face their common problems and talk them over, and lo and behold the "people's revolution" is on its way.

As an example of how this should work, Alinsky points out that the "hope of organized labor does not in the last analysis rest in its labor union. It rests in an organized, informed, participating, ever fighting American people." What is a "last analysis"? Where does one find one, or how can one be reached? And it might be observed that "an organized, informed, participating, ever fighting American people" is a conception that strikes terror into the hearts of prodemocratic realists. Whose organization would it really be? Whose pattern of information would be fed to the "participating, ever fighting American people"?

What Alinsky is pleading for is a species of American totalitarianism. "This sectional, sectarian isolationism which is so prevalent today in America renders the people more vulnerable to every social ill and in the end catastrophe." He does not see that out of our divisions, our endless talkings over, wranglings, strikes, and tensions, a democratic people evolves adjustments to changing conditions; he sees chiefly the costs and inefficiencies of this sort of thing. Alinsky does not want many philosophies and many methods; he wants "the philosophy and the methods of creating a better way of life."

Take a jigger of Buchmanism and Moral Re-armament. Add a dash of synthetic maraschino juice—for color. Mix with an extract of what makes middle-class intellectuals weary of the tentative and jangling but superlatively workable processes of democracy, an extract sometimes labeled fascism. And you have a concoction whose oddly assorted admirers can include Jacques Maritain and the Chicago *Sun*, and it bears the enticing title, *Reveille for Radicals*.

ALFRED MCCLUNG LEE

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United Nations Primer. By SIGRID ARNE. New York: Farrar & Rinehart, Inc., 1945. 156 pp. \$1.25.

This brief volume contains the texts of the official communiques and agreements reached at fifteen meetings of representatives of the allied powers during the course of World War II, accompanied by a narrative and interpretive account of the events leading up to each conference. In describing the latter, specific attention is given to the development of the belief that another attempt should be made to establish an international security organization. Roosevelt and Churchill recognized the need of such a body when they met and drafted the Atlantic Charter and each succeeding conference appears to have given the idea an added impetus. The general plan of the new world league was sketched at Dumbarton Oaks. What happened at San Francisco is, of course, fresh in everyone's memory.

The descriptive material is distinctly reportorial in style and obviously suffers from the limitations that accompany the interpretation of events soon after they have occurred. The use of the word "primer" in the title implies that the book was written primarily for the benefit of laymen. If this assumption is correct the author could well have provided maps, pictures and charts as a means of illustrating and vitalizing the text, but all such aids are conspicuously absent. An index is also lacking. Yet the work may be of some value to those who wish a compilation and a brief running account of the documents referred to above.

VERNON DAVIES

University of Minnesota

League of Nations and National Minorities. By P. DE AZCÁRATE. (tr. by Eileen E. Brooke) New York: Columbia University Press, 1945. 225 pp. \$2.00.

The author of this monograph was for twelve years the Director of the Minorities Questions Section of the League of Nations. He presents here a report of the activities of the League in administering the provisions for fair treatment of national European minorities. Despite the justified criticisms of the effectiveness of the League in handling infringements on minority rights, there is much in the pattern of action the League followed which can serve as an orientation for the present post-war era. Why the League was a weak instrument is also significant now when the new machinery of

the United Nations is being established. Wilson's noble conception of the "self-determination of peoples," which heartened millions of minority peoples all over Europe, was undercut by the fact that the peace conference in January of 1919 was betrayed by the bobbing up of secret treaties and by the fact that the League had no coercive power to deal adequately with the minorities problem. The League could act only if a member of the Council brought to the Council's attention a violation or danger of violation of the minorities provisions. This was tantamount to having its hands tied in that if a minority complained it could later be spanked by the very member of the Council which was supposed to rectify the injustices within its borders.

The author is opposed to the conception of exchanges of population as a solution to minority problems on the grounds that such a policy would make untenable the possibility for peoples of different race, language, religion and nationality to live peaceably together. Students of culture and society can easily demonstrate that such homogeneity as the principle of population exchanges proposes is not only impractical but impossible because of the mixture of populations. The author calls therefore for an international bill of rights to safeguard heterogeneity. He fails to see, however, that such a principle of international law must be rooted in a different type of economic and political structure. Economic nationalism and power politics culminate in irridentism and the use of minorities as scapegoats and pawns in the sinister game of market domination and "great power" prestige.

To those familiar with the claims and counter claims raised by the diverse minority groups within Poland, the author's position in this volume with regard to the Polish treatment of minorities is untenable. For instance, in one place Azcárate points out "The Council of the League and its administration organ, the Minorities Section of the Secretariat, devoted more of their time and efforts to Polish minority questions, during the twenty years of the last post-war period, than to those of any other country." But at another point, in discussing the Jewish minority, the author maintains that the Polish government's policy was "a wise one . . . a model of governmental policy towards minorities." He also states "During the fourteen years of my service in the League of Nations, I do not remember the Jewish minority in Poland ever raising any questions or making any complaint concerning its treatment by the

Polish authorities." These contradictions become even more disturbing in face of the author's knowledge of the involved channels through which claims had to be made and the possibility of intimidation of minority leaders by governmental officers and the sidetracking of claims in redtape. Moreover, it is common knowledge that many Polish authorities were notoriously anti-Semitic. Even after Poland was under the heels of the German army, the Polish parliament-in-exile, consisting of many of the erstwhile governmental leaders, did not lose any of its previous anti-Semitic outlook when they declared that after the war Poland would have no place for the Jews and that the only solution was to deport all European Jews to a desert island off the coast of Africa.

The shortcomings of this volume are truly surprising considering the fact that the author spent so many years with the League in charge of minority questions and had at his disposal a mine of information. He produced a superficial and uneventful report which contributes very little to the knowledge of the minority problem of Europe.

SAMUEL M. STRONG

University of Nebraska

Shinto, The Unconquered Enemy. By ROBERT OLESON BALLOU. New York: Viking Press, Inc., 1945. 250 pp. \$2.75.

The purpose of this book is to provide the general reader with an understanding of Shintoism and to show how it is related to the program which we must follow in making the peace if we are to conquer "Shinto, The Unconquered Enemy." The work is divided into two sections, the first ninety pages are an interpretation of Shinto, the remainder consists of translated excerpts from the official documents which make up the sacred books, and recent pronouncements showing adherence to Shinto thought dated as late as August 19, 1945. There is a good index and an annotated bibliography which, while definitely dating the work, does much to make it more valuable for its professed purpose.

The Japanese, in typical ethnocentric fashion, consider their own creation and even the creation of the islands on which they dwell to be unique acts. Ballou emphasizes the phallicism in their creation myth and hints that it may account for much of the sex interest in the modern adult Japanese. Emphasizing the syncretic growth of Shinto, he points out that in rural

regions it is likely to be combined with earlier animistic ceremonies and take on characteristics of the tree-worshipping cults of an earlier Japan. A period during which Chinese institutions, particularly Confucianism and Buddhism, were popular left its mark upon Shinto, and provides much of the saving grace which Ballou would select for survival, though it also gave Shinto that disregard for the things of this world which characterizes it.

Shinto justifies the "Chosen Race" dogma not only through its creation myth, but by continuous revelation through a living God-head, the Emperor. It establishes the superiority of military virtue over all other values, and willingness to die for honor as the supreme test of manhood. This doctrine provides an effective instrument for any class seeking control through force, and it lay convenient to hand as the desirability and necessity of conquest to feed the industrial machine and a growing population became apparent. Other elements in Shinto which might have been selected for emphasis by a dominant class seeking other ends were neglected.

It is Ballou's contention that we can select from Shinto scripture ideas and ideals that lead toward those goals which we ourselves seek for Japan, and behind this sacred facade manipulate the Japanese Gods to our own ends. He proposes to strip Shinto of the element of state worship, leaving the remainder of the structure intact. "If we are wise our propagandists will make the most minute study of all Shinto literature from A.D. 712 to the present day and enlist the co-operation of Shinto sects to the end that the unifying strength of the ancient religion may be preserved as a base on which to build new interpretations in which the official state doctrine . . . may be superseded in Japan by an enlightened universalism. . . ."

In light of the popular reaction to the official renunciation of his "divinity" by the emperor it is at least questionable as to how deep the sacred concepts of Shinto are embedded in the thinking of the Japanese. In any event the question as to whether it is wise to attempt to bolster up the sacred thinking of a pre-industrial era could be answered only with much more evidence than this little book contains.

It is also quite likely, though, that MacArthur and his advisers will seize upon any device that will help to secure "stability" in the rough times that lie ahead, thus syncretism will continue to characterize societal evolution in Japan.

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Whether Ballou's chosen elements of Shinto survive or others not to his liking, the excerpts from the Japanese scriptures which make up the bulk of the work will provide a convenient reference for those who wish to seek the roots of the present in the past.

W. F. COTTRELL

Miami University

Dynamite on Our Doorstep. By WENZEL BROWN. New York: Greenberg Publisher, Inc., 1945. 301 pp. \$2.75.

This volume is an impressionistic, anecdotal, and romanticized account of the author's residence as a teacher of English in the Puerto Rican public schools and of a later brief visit to the island. With no knowledge of the language, the territory, or the people—he thought at first that Puerto Rico was Costa Rica—the author's record reveals more in regard to his adolescent naivete and provincialism than it does in regard to the life and people of Puerto Rico. He is impressed by the poverty of the people and the filth of the island; he relates his experiences in dives and with mendicants and prostitutes; he is excited, albeit somewhat confused and a little incoherent, about the "revolution" or "revolutions" of Albizu Campos and Luis Muñoz Marin. He reaches the pinnacle of his absurdities in his somewhat coy accounts of his rendezvous, in a cane field, and other romantic escapades with a young and beautiful girl of an old family of the Spanish sugar aristocracy. He talks about but does not understand race relations in Puerto Rico. The author uses some of his space to discuss the economic, political, and social problems of the island but his discussion nowhere shows any genuine understanding of the basic realities.

E. B. REUTER

Fisk University

Man and Society: The Scottish Inquiry of the Eighteenth Century. By GLADYS BRYSON. Princeton, New Jersey: Princeton University Press, 1945. xii + 287 pp. \$3.00.

Professor Bryson has undertaken in this volume to survey, with considerable thoroughness, a relatively neglected phase of the history of western social thought; namely, the work of the eighteenth century Scottish writers on moral philosophy. She has concentrated her attention on eight figures, five of whom—Francis Hutcheson, Adam Smith, Thomas Reid, Adam

Ferguson, and Dugald Stewart—were professors in Scottish universities; while David Hume was excluded from that function presumably on account of his extremely critical attacks upon the religious teaching of his time; and two others, Lord Kames (Henry Home) and Lord Monboddo (James Burnet) were judges. Though Adam Smith and David Hume have become most widely known to students of later generations, all eight of these men were prolific writers, and Dr. Bryson is easily able to show currents of influence running from one to another and involving all of them (so far as the factor of time would permit). They may fairly be said to have been neglected by many recent writers on the history of social thought, the present reviewer included, in so far as the latter have been unduly influenced by Small's emphasis on the German antecedents of modern social science, or by preoccupation with the great French pioneers, especially Comte and Durkheim. In contrast, Miss Bryson demonstrates how extensively the social sciences, and sociology in particular, in our own country in the nineteenth century and the early twentieth were anticipated and influenced in some of their important conceptions by these eighteenth century Scottish philosophers.

There has been and doubtless will continue to be a great deal of debate among social scientists concerning the value of detailed study of the work of their early forerunners. The volume of printed matter which may be reasonably included in a reading list for such study is enormous and, of course, constantly increases. If one become too much preoccupied with historical inquiries, one may find that he never gets around to consider adequately the facts and problems of his own day. Nevertheless, if we can avoid this extreme, we shall probably find the reading of the works of the social philosophers of the past rewarding, and in such an undertaking, we shall do well to examine the contribution that was made by the eighteenth century Scottish moral philosophers. It was not without justification that their philosophy came to be known as the "common sense school"; in fact, their persistent recurrence to what they took to be the data of "experience" seems to anticipate one of the chief emphases which John Dewey derived from William James. To be sure, the Scottish philosophers thought these data might be had, in large part, by an introspective examination of one's own mind; they lived too soon to be in a position to appreciate as Dewey

does the value of instruments of precision and of scientific experiment, but still "experiment," "experience," and "empiricism" were their criteria. And they achieved in no small degree insights in the realm of social psychology which we are in the habit of regarding as peculiarly modern.

The book appears to have been produced by competent, painstaking scholarship. It is provided with adequate notes, bibliography, and an index.

FLOYD N. HOUSE

University of Virginia

Yankee Stonecutters. By ALBERT TENEYCK GARDNER. New York: Columbia University Press, 1945. 84 pp. \$4.00.

This book treats of a forgotten period in American sculpture—the classic revival of 1800-1850—and of some of the social forces which conditioned it. The sociological interest in this analysis lies not only in the discovery of these social factors but also in the ideologies and rationalizations which accompanied them.

The half dozen informal essays in this volume had their original stimulus in the preparation of an annotated catalog for the collection of early 19th century American sculpture in the Metropolitan Museum of Art. As more material was found in the process of research, this "catalog" developed into a little book.

Among the more important factors were: (1) the desire to memorialize the heroes of a young country developing nationalistic sentiments; (2) the public buildings which required "memorial effigies"; (3) the desire for an outlet on the part of a growing number of men of wealth who not only were interested in abstract decorative pieces but also in themselves "being done" in stone; (4) the cemetery monuments which were becoming tourist attractions.

For this activity many mechanically minded young men had served their apprenticeship in wax works and in wood carving. New models were found in the neo-classic revival then overtaking Europe from where, then as now, the United States imported its fashionable tastes. This intrusion of classic models into a Puritanic society could not be expected without some disorganization. Many insisted that they did not like the statue of George Washington. "... they have a Roman gown on him, and he was American. . . ." Charles Sumner had warned Greenough in 1841, while he was working on the statue of George Washington "half clothed like a Roman God," against the criticism of those

"knowing nothing about art." To those who "knew something about art" Greenough, however, "rises above mere portraiture, and seeks to symbolize in a colossal statue of God-like form, the nation's cherished father." With the Civil War the crop of equestrian statues somehow spoiled the taste for Greek "ideals," for which the people had never really developed an appetite.

This illustrated book contains many explanatory allusions which are certainly not conveniently available elsewhere. It is an anecdotal rather than a systematic treatise, but contains much of the stuff from which such more fundamental treatises are made. It is a provocative essay on a period quite neglected by art historians because the statues which it produced do not have "permanent" value. For socio-historical purposes, however, they have just that.

JOHN H. MUELLER

Indiana University

Criminology and Penology. By JOHN LEWIS GILLIN. Third Edition. New York and London: D. Appleton-Century Co., 1945. Pp. x + 615.

The volume under review is a revision in part of the author's original work, and an attempt to clarify and modernize certain sections by inclusion of new material. In this reviewer's judgment, the author has not succeeded in presenting either a coherent, systematic, consistent, or up-to-date summary of contemporary criminological or penological, to say nothing of police, knowledge.

The organization should be such, especially in criminology, that the student follows the process initiated by the criminal act progressively and logically. The organization of this book is confusing and too frequently takes the student over the same road two or three times. It is difficult to discover the author's own philosophy of causation. For example, on page 213 he tells us: "A concomitant step is the abandonment of the time-honored belief in individual responsibility that is the omnipresent attendant of the doctrine of free will," while on page 256 he says: "In such a situation an individual may choose to act at variance with the customary and traditional pattern." It sounds like the argument of a Pennsylvania legislator who was absolutely opposed to the death penalty except for those who deserved it! His attempt to formulate "a sociological theory of crime" emerges as a curious potpourri of free will, differential association,

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Durkheimian inevitability, the social psychology of W. I. Thomas, G. Stanley Hall's Message of the Zeitgeist, Sellin's conduct norms, social psychiatry, but no mention of Healy's generally valid thesis.

Too frequently the author's references to "recent" surveys, knowledge, or research turn out to be thirty years ago. This may sound like trivial carping, but such defects are a real handicap to the teacher and student. This is the first text that refers to capital punishment as a "penal institution."

Personally, this reviewer has campaigned vainly to require all authors to give correct initials of writers referred to in footnotes and in the index. The index in this volume cites "Barnes, 68, 286." On page 68 the author is disagreeing with Harry Elmer, and on page 286 he is quoting Justice Barnes.

Professor Reckless in his review of Barnes and Teeters suggests a moratorium on history in criminology texts. Apparently Professor Gillin disagrees, since he devotes nearly one-half of his book to the history of crime causation and theories and methods of punishment. The eleven pages on capital punishment are certainly space enough, but no student will have even a moderately adequate understanding of contemporary trends and methods. His thirteen-page discussion of "Penal Transportation" might well be condensed into a well-written paragraph.

Discussing "Present-Day Methods of Discipline" in contemporary prisons, Professor Gillin states: "The spirit out of which those severe punishments grew is still retained in many of our prisons." Reference in this case is to the *American Magazine*, February 1912! On the next page (442) we read: "Nevertheless, in many of our prisons brutal methods of discipline still remain." Reference here is to Barnes' history of New Jersey's penal institutions, 1917. Surely college students who pay out good money for a textbook have a right to know the names of a few of these "many of our prisons" as of 1944. And lastly, the author stoutly maintains that a textbook oriented toward "traditional" crime, such as murder, burglary, rape, etc., is not to be regarded as "anachronistic," yet he has already stated forty-eight pages earlier that crimes involving police corruption, crooked judges, and political manipulation are "probably . . . the most highly injurious to society."

The volume seen in its entirety strikes this reviewer as out of date, heavily historical, and poorly organized and proof read. Nevertheless, we must applaud Professor Gillin's humility and true scientific caution. No wild statements

are found in this volume. Crime is definitely a social product. Certainly no bloody shirts will gather momentum, no *vache enragée* will swing into action. The acme of all sociological non-committal caution is to be found in this statement: "Since beliefs are in part the result of social experience. . . ." What's the other part, Doctor?

Fundamentalists should applaud his discriminating and tentative acceptance of the Higher Criticism for this observation: ". . . some of the patriarchs of the Old Testament *are said* to have had more than one wife" (*italics mine*).

J. P. SHALLOO

University of Pennsylvania

The German People. A Social Portrait to 1914.

By ROBERT H. LOWIE. New York: Farrar & Rinehart, Inc., 1945. 143 pp. \$1.75.

Those who are interested in the backgrounds of German life and thought previously to 1914 which paved the way to the rise of Hitler and his doctrines cannot neglect Lowie's portrait of persons and events. His concern throughout is with their "social psychology, the attitude of Germans of different classes and at different times." He points out that there is no German race, indeed no German language common to all "Germans," if by "language" one means a speech common to all, rather than a linguist's concept of related dialects. There is a trenchant analysis of German attitudes toward regionalism, nationalism, and cosmopolitanism, and their reverberations on social and national attitudes.

Topics treated under the heading Imperial Germany include: The Political System; Education, Material Conditions; Social Classes, under which are discussed Aristocracy, The Middle Classes, The Working Class, The Peasant, Artisans and Tradesmen, Classes and Family Life, The German Jews; Religion and World View; A German Looks at Germany in 1914. There are testimonials from Germans eminent in science, literature, politics, or other fields. Appendices include a Biographical Glossary, Selected Reading List, and References.

On every page the reader is impressed with the incisiveness and conciseness of the treatment; the understanding insight; the unflinching fairness of the analysis and depiction, which become by virtue of that fact all the more devastating as a record of historic consistence. He will be impatient to see the second portion of this work, which will deal with Germany during the last three decades.

WILSON D. WALLIS

University of Minnesota

BOOK NOTES

Psychoanalytic Therapy: Principles and Application. By FRANZ ALEXANDER, THOMAS MORTON FRENCH et al. New York: The Ronald Press Company, 1946. Pp. xiii-353. \$5.00.

"The work set forth in this volume is a logical continuation of a trend in psychotherapy which began with Freud's discovery of the phenomenon of transference as the dynamic agent of the curative process." The conclusion is reached that, "in order to be relieved of his neurotic ways of feeling and acting, the patient must undergo new emotional experiences suited to undo the morbid effects of the emotional experiences of his earlier life. Other therapeutic factors—such as intellectual insight, abstraction, recollection of the past, etc.—are all subordinated to this central therapeutic principle." This point of view is illustrated by numerous case histories of deviate personalities, the psychoanalytic treatment used on each and accompanying interpretations.

Blue Book on Argentina. Memorandum of the U. S. State Department, Washington D.C., February, 1946. New York: Greenberg, Publisher, 82 pp. \$1.00.

This document purports to be the result of a careful study and evaluation of all the information about Argentina collected by the United States government during the time of World War II. A mass of evidence taken from letters, captured documents, secret agreements and interviews with Nazi officials is presented which, if valid, demonstrates that the Castillo regime and particularly the Peron government which followed it actively collaborated with the Axis powers with the view of defeating the allied nations and have been largely successful in transforming Argentina into a fascist state.

Farms and Farmers: the Story of American Agriculture. By WILLIAM H. CLARK. Boston: L. C. Page and Company (Inc.), 1945. Pp. xx+345. \$3.75.

This is one of the American Cavalcade Series. It gives an account of the development of American agriculture that is encyclopedic in design but sketchy as to detail. The author, while admitting the necessity of being highly selective in his choice of materials, does manage to mention a large variety of things. Attention is given to the contributions of early English

and also American Indian farming methods, rural migratory movements, regional differences in the development of crops and cropping techniques, farmer political movements and organizations, programs of governmental aid to farmers, conservation, mechanization, the benefits to be derived from chemurgy and the future of agriculture. An optimistic, moral tone pervades the treatise.

Definitions of Terms and Instructions for Reporting Monthly Statistics of Family Casework. New York: Russell Sage Foundation, 1946. 25 pp. 20 cents.

This revised report form with definitions and instructions has been prepared by the Department of Statistics of the Russell Sage Foundation with the advice of the Committee on Statistics and Information Services of the Family Welfare Association of America and after consultation with the Statistical Department of the Community Chests Councils, Inc. It should help to further standardize the collection of social work statistics in the United States.

The United States After the War. By C. W. DE KIEWEIT (Editor). Cornell University Press, Ithaca, New York, 1946. 180 pp. \$2.50.

This publication contains an introductory statement by the editor followed by six addresses on problems of the post-war era in the United States given at the summer session of Cornell University in 1945. Subjects discussed in relation to what is likely to happen during the years following the war include: Social Planning by Alvin H. Hanson, Agriculture by F. F. Hill, Organized Labor by Louis Hollander, Business by Walter D. Fuller, Power Politics by Herbert W. Briggs and Education by George W. Stoddard. The short introductory statement by de Kieweit makes some effort to point out areas of agreement and disagreement within the series of lectures. While this helps, the main task of interpretation and integration rests with the reader.

A Comparative Study of Human Reproduction. By CLELLAN STEARNS FORD. Yale University Publications in Anthropology. No. 32. New Haven: Yale University Press, 1945. 111 pp. \$1.50.

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Yale Institute of Human Relations, was to obtain further insight into the origin and persistence of human customs in different cultures. Are group habits purely arbitrary or do they represent tested solutions to tangible life problems? Customs surrounding the reproductive cycle were chosen as those best suited to throw further light on this question. The literature of 64 societies was selected on the basis of location and fullness of information, with some attention given to the principle of random sampling. The culture of each group as related to menstruation, coitus, conception, pregnancy, childbirth and early parenthood was taken into account. The general conclusion is reached that a person acquires drives and values which are conducive to the social welfare of the group in which he lives.

The Last Trek of The Indians. By GRANT FOREMAN. Chicago: University of Chicago Press, 1945. 382 pp. \$4.00.

The author, who is a lawyer, spent a number of years in Oklahoma classifying tribal lands and resolving land contests between Indians. Effective conduct of this work required a knowledge of Indian laws, customs and usages and this in turn stimulated an interest in the cultural and historical background of the Indian tribes from the North and East who were compelled to leave their ancestral habitat and move to Oklahoma where they were allocated land by the government. This study embodies not only what the writer learned from his experience as an attorney but also the results of considerable documentary research since leaving the practice of law. The legal aspects of Federal administration and maladministration of Indian affairs are analyzed in some detail against a background of historical events.

Houston Children and the Police. By Research Bureau Staff; *Preface* by Elbert L. Hooker. Houston: Bureau of Research, Council of Social Agencies, Houston, Texas, 1946. 44 pp. (Vol. 2, No. 2, April 1946 issue of *Social Statistics*.)

This is a modest, mimeographed, but none-the-less excellent study of the children (nearly 8,000 in 1944) handled by the Crime Prevention Division of the Houston Police Department for the years 1942-1945 inclusive. A varied but relatively complete statistical analysis is presented showing distributions and trends with respect to age, residence, place of offense, type

of offense, seasonal influence, disposition of cases, and recidivism. Maps and charts help make clear the ecological pattern and add to the usefulness of the report.

Bibliography of Indonesian Peoples and Cultures. By RAYMOND KENNEDY. Yale Anthropological Studies, Vol. 4, New Haven: Yale University Press, 1945. 212 pp. \$2.50.

A lengthy listing of literature in the fields of sociology, ethnography, archeology, linguistics, geography, colonial administration, education, economics and history dealing with the peoples and cultures of Indonesia. Standard references on geology, botany, zoology and kindred subjects have also been listed because of the bearing they have on the human and cultural scene. The scheme of classification is according to islands or island groups and within these by tribes and tribal combinations.

Labor in the Philippine Economy. By KENNETH K. KURIHARA. Stanford University: Stanford University Press, 1946. 97 pp. \$2.00.

This discussion of the labor problem in the Philippines is one of several studies initiated by the Institute of Pacific Relations to explore labor conditions and the state of social welfare in Southeast Asia. The author was formerly on the staff of the Department of Economics of the University of the Philippines and more recently has been a Research Economist for the United States government. In this brief report he seeks to present the basis for an understanding of the problems of Philippine labor within the uncertain national economy of the Commonwealth Government and its elaborately planned but war-interrupted program of "Social Justice." The attempt is made to deal in a descriptive and factual manner with a story that often involves basic conflicts and controversies in the organization of Philippine life, both political and economic. The picture presented deals primarily with pre-Pearl Harbor days, with only general comment on implications for the post-war economy.

The People of the Soviet Union. By CORLISS LAMONT. New York: Harcourt, Brace and Company, 1946. 229 pp. \$3.00.

A compact, readable account which summarizes available historical and cultural material dealing with sub-groups within the Soviet Union. Considerable attention is also given to the Communist minorities policy. The Tsarist-

enforced Russification of national and ethnic groups is brought into sharp contrast with the present administration of the sixteen federated Soviet republics, within which, according to the author, cultural differences receive a large measure of toleration. A number of maps and charts and 32 pages of photographs contribute to the usefulness and interest of the report.

Sociology of Tristan Da Cunha. By PETER A. MUNCH. Publication of Det Norske Videnskaps-Akademi, Oslo: I Kommissjon Hos Jacob Dywab, 1945.

The object of this investigation is the people living on the most northerly of the very remote group of islands in the South Atlantic known as Tristan Da Cunha. The study was done under the direction of a Norwegian Scientific Expedition and includes detailed geographic and historical materials, a descriptive inventory of customs, traditions and material traits and a somewhat impressionistic treatment of social relations and attitudes.

Unfinished Business in American Education. By JOHN K. NORTON and EUGENE S. LAWLER. Washington: American Council on Education, 1946. 64 pp. \$1.00.

This is the popular, graphic presentation of the essential information originally appearing in the two-volume mimeographed report *An Inventory of Public School Expenditures in the United States* by the above authors, presented to the American Council on Education in 1944. The sad fact of educational inequality is abundantly documented. By reducing masses of information to simple graphs and statistical tables, a valuable publication at moderate cost has been made possible. It deserves widespread circulation and study.

The Origin and Development of Group Hospitalization in the United States, 1890-1940. By J. T. Richardson. The University of Missouri Studies, Vol. 20, No. 3. 107 pp. \$1.25.

As the title suggests, the purpose of this report was to trace the evolution of group hospitalization in the United States.

Special attention is given to the adequacy of pre-paid plans and particularly the Blue Cross plan in meeting the hospitalization needs of low income groups. The conclusion is reached that while existing group plans have achieved satisfactory legal recognition, are actuarially sound and do not interfere with the physician-patient relationship, the premium rates are still too high for the low income segment of the population and low income groups in rural areas in particular are being neglected.

Conscientious Objectors in Prison, 1940-1945. Pacifism and Government Series V, Number 2. By MULFORD SIBLEY and ADA WARDLAW. Philadelphia: The Pacifist Research Bureau, 1945. 68 pp. 25 cents.

Over five thousand conscientious objectors were imprisoned in the United States during World War II—more than eight times as many as in World War I. This study endeavors to explain why these men were sent to prison, how they were tried, the effect of prison life upon them and their reaction to it, their activities as inmates, their relationships with prison administrators, the manner of release and, finally, the social significance of their incarceration. "A more nearly accurate account could have been given had the Bureau of Prisons been willing to allow a freer examination of crucial materials."

Statistical Yearbook of the League of Nations, 1942-1944. New York: Columbia University Press, 1945. 315 pp. \$3.50.

A compilation of tabular data giving available information on population and vital statistics, territorial changes, banking and finance, imports and exports, exchange rates, agricultural, mineral and industrial production, war expenditures and debts of the nations of the world, with explanatory notes in French and English. Due to confusion and communication difficulties engendered by World War II, some of the estimates are conjectural. The report in general is not to be considered as reliable as preceding issues.

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